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PUBLICATIONS ON
EDUCATIONAL LIBRARY MATERIALS

By Carter Alexander

HOW TO LOCATE
EDUCATIONAL INFORMATION AND DATA
A text and reference book

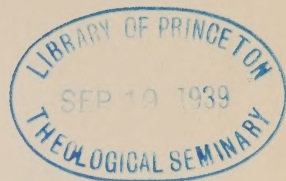
ALEXANDER LIBRARY EXERCISES
A set of twenty-nine exercises to accompany the text

ALEXANDER UNIVERSAL BIBLIOGRAPHY CARD
For Taking References from Various Sources

BUREAU OF PUBLICATIONS
TEACHERS COLLEGE, COLUMBIA UNIVERSITY

HOW TO LOCATE EDUCATIONAL INFORMATION AND DATA

A TEXT AND REFERENCE BOOK



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BUREAU OF PUBLICATIONS
TEACHERS COLLEGE, COLUMBIA UNIVERSITY
NEW YORK

1935

To

*Those Without Whom This Book and the Accompanying
Exercises Could Not Have Been Written*

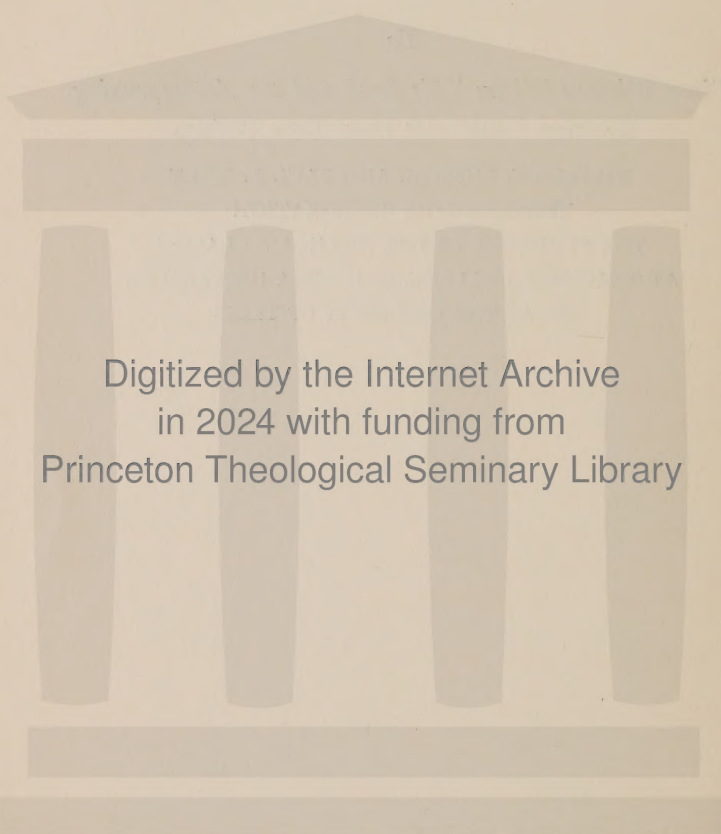
WILLIAM F. RUSSELL AND PAUL R. MORT

THE CARNEGIE CORPORATION

THE STUDENTS IN THE AUTHOR'S CLASSES

AT TEACHERS COLLEGE, COLUMBIA UNIVERSITY,

AND AT THE UNIVERSITY OF TEXAS



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PREFACE

THIS book and the accompanying book of exercises aim to remove an important feature of educational work from the status allotted to the weather in the often-quoted observation that a great deal is said about the weather but nothing much is done about it. For years educators have talked and written much about more effectively utilizing library resources on their professional problems, but little has actually been done about it. Fortunately, in the case of educational library materials, something *can* be done. These books do it. They practice what they preach.

The two books are the first to specialize on meeting a rapidly increasing need of educators. They consequently require much more than a conventional preface. Their preface must also provide suggestions for instructors and students who will teach or study how to locate educational information and data.

To accomplish these purposes and yet provide for the necessary varieties of readers, the preface has two parts, each with appropriate subheadings. A reader can thus easily single out the sections of interest to him. Part One deals with the two books as such. Part Two treats of their uses.

PART ONE. THE NATURE OF THE TWO BOOKS

I. WHO NEEDS THIS TEXT AND THE ACCOMPANYING EXERCISES?

The two books have been prepared to meet the increasingly urgent need of certain educators numbering scores of thousands. These are the *educators who now lack the knowledge and skills for locating and profitably using library materials needed for success* in their professional work, with the time and energy at their disposal. The two books will be highly useful to practical schoolmen in the field, undergraduates and graduate students in education, and faculty members as well as many librarians in

teacher-training institutions. In fact, every professionally alive individual in each of these huge groups needs to know how to locate quickly—in time to count the most—the educational information and data requisite for success in his work.

Certain *trends make such knowledge increasingly necessary* for the man or the woman who wishes to rise professionally in any educational work involving more than the isolated teaching of a narrow specialty. The most important of these trends are: The tremendous and bewildering increase in the volume of educational literature; widespread participation in course-of-study making and creative supervision with its emphasis upon independent study by teachers; the placing of responsibility upon the student to organize his thinking through independent study, and the substitution of wide library reading for a single textbook; in teacher-training institutions, distinct movements toward broader professional preparation of educational leaders, and toward much better provisions for part-time students who cannot afford to give up their field positions while taking additional training; competition faced by schoolmen and women in the field from teachers who have been using libraries recently in the training institutions.

Such trends make *new demands* not only upon educators but upon those who train educators, particularly *upon the faculty and librarians of the teacher-training institutions*. Just as the educator finds it increasingly difficult to keep up with new library resources and techniques, so the faculty members and librarians who serve him find it difficult to keep up with the rapidly expanding field of education. Many faculty members and educational librarians will find this book a valuable help in bringing the library and the various courses in education into closer coöperation.

II. SPECIFIC ADVANTAGES OF THE TEXT AND ACCOMPANYING EXERCISES

1. *The saving of time for users* will run into the hundreds or thousands of hours in the course of a professional lifetime, depending upon how many exercises are done.

The *text* is the first book to do comprehensively four things: (1) Chart the great storehouses of useful knowledges on practical educational problems or on educational research; (2) describe exactly where the sources are located and how to reach them; (3) furnish keys for unlocking them; and (4) give directions for utilizing the contents, once the doors are open. On all four things the book makes easily available information hitherto inaccessible to the practical schoolman or educational researcher because it existed in such widely separated and little known places.

The *exercises* will in the long run save much time for anyone doing them. They enable the student to master the skills for quickly locating and speedily utilizing the library resources charted in the text. They make it possible for him to become reasonably independent and resourceful in his library work, two things essential for saving time and energy in studies involving library materials. One of the writer's students who recently spent ten days on the exercises reported that within that time she learned more about how to find and use library materials than she would have gained during two years spent in regular graduate courses, or in her field work of supervising teachers.

2. *The text and exercises are constructed to promote practical library resourcefulness on the part of the individual user*, whether he is a schoolman in the field, or a college or graduate student in education, or an educational researcher.

The *combination avoids mere memory work or routine, anti-like library activities*. For example, the librarian's inserting call numbers for the references in one copy of the text will save students many hours of profitless work which can be far better employed in growing in the mastery of valuable library materials bearing on education. The text is so arranged and indexed as to make a reference book easily accessible in all parts. It is deliberately written largely in the second person, to carry the reader along in thinking out problems involving the use of library materials so that later he can think out such problems on his own account.

A *user of the text can start* with any chapter, or of the exercises with any exercise, and select out the most important chapters or exercises for his particular needs. In the long run, however, the

present arrangement of chapters and exercises will be found to be the best for most users. This arrangement is psychological rather than logical and has proved to be the best order in the writer's years of experience in teaching hundreds of students how to run down sources of educational library materials.

The *plan of the text* is as follows: Part One (Chapters I and II) aims to give an over-view of the entire book. Part Two (Chapters III-XVI) presents the general library sources and techniques. In this part, Chapters III-VI are devoted to the fundamental knowledges and skills needed; Chapters VII-IX, to the major skills to be mastered; and Chapters X-XVI, to the fundamental library tools. Part Three (Chapters XVII-XXVIII) treats special library sources and techniques. For details, see Table of Contents.

3. The *flexibility of the text and exercises* adapts them to nearly all needs of the individual educator for information on how to run down library materials on his field or research problems. See Part Two of this preface on How to Use the Two Books.

4. The *text and exercises are easily adapted to a wide variety of instructional uses* in courses at various levels in teacher-training institutions and schools for training librarians of such institutions.

The importance of knowing how to use library materials is now recognized in short courses on the library, and in sections of courses on educational research. For all such work the text can be used with special assignments and selection from exercises can be made by the instructor. The content of the exercises has been repeatedly gone over by practical schoolmen and women as well as educational researchers, so that the items in the exercises are items concerning which educational faculty members should have knowledge.

One great instructional advantage of the combination is that a student can, if necessary, take the work and do the exercises at any time. The writer's own class, by using this combination, is run without any class meetings. Students select the exercises they wish to do, turn them in for correction, and meet the instructor individually for special help. They come in when it suits

them and take a final examination. Thus schoolmen and women in the field can come in for concentrated work at special times such as the Christmas or the Easter vacation, or on Saturdays. The instructor does not have to be present all the time, but the library must be open. Many teacher-training institutions can reach a considerable body of exceptionally able schoolmen and women in the field who cannot get time off from their work for courses run on scheduled periods, but who would be interested in the kind of individual work easily possible with this text and exercises.

III. STYLE OF THE BOOKS

As both books are written for the doer rather than for the talker, the second person is used wherever possible without too much artificiality. This plan is followed to carry the reader along so that he will constantly apply what he reads to his own library problems.

In a pioneer undertaking of such magnitude as the preparation of these two books, there is a definite limit to the uniformity of style and references that is feasible or desirable. To attain such uniformity in high degree would have been possible only at the sacrifice of considerable thought, scope, serviceability, and availability at the time these qualities would count the most. Moreover, the precision and polish attained in very scholarly publications, where the form has received as many years of work as it takes to polish a large telescope's mirror, are out of place in this undertaking. If students using these books are to secure the resourcefulness needed in library utilization, the books themselves should show some variation in style and uniformity.

The writer has all along been fully aware that the forms of references and similar mechanical items of style in the two books will not meet the approval of extreme sticklers for standardization. He has deliberately preferred to make a reasonable effort at uniformity and then to make the materials available to the profession as early as possible. To secure much more would have taken many additional months of meticulous labor without adding appreciably to the usefulness of the books.

IV. ACKNOWLEDGMENTS

In addition to those persons mentioned in the dedication and in the references, the writer is greatly indebted to many others for encouragement, help, and special information. The germ of the idea for the books probably came to him from Professor Henry Suzzallo, who gave him as a student at Teachers College in 1909 a few pages of mimeographed suggestions for using the library, and notes on educational sources. He understood that these had come originally from Professor Cubberley at Stanford. With the aid of various librarians and faculty members he developed the idea in teaching administration courses at the University of Missouri, George Peabody College for Teachers, and Teachers College, Columbia University. At this last place the effort culminated in the research pamphlet which has gone through one mimeographed and three printed editions and is listed as Reference 10 in this book.

Special aid was rendered by the following, the specific nature of the help from each being acknowledged in the proper place in the text: Professors Eleanor M. Witmer and Erling M. Hunt, and Misses Ethel M. Feagley, Clara E. Derring, and Margaret C. Miller, of Teachers College; Misses Bess Goodykoontz and Sabra W. Vought, and Mr. W. D. Boutwell of the United States Office of Education.

The writer's student assistant, Mr. Arvid J. Burke, has been of signal service throughout the work for ideas, help on writing, verification, and the like. His secretary, Miss Helen Thorp, has also been of special assistance in making the materials much more serviceable for students.

*PART TWO. HOW TO USE THE TWO BOOKS*I. SUGGESTIONS TO INSTRUCTORS USING THE TEXT
AND EXERCISES

In addition to the items starting in Part One, Section II, 4 preceding, the following suggestions allow for varying practical teaching situations:

1. The *organizations* are so flexible that it is very easy for an instructor to select, or for students to select, from the materials, so as to offer a course for any number of semester hours up to and including four, and on either a class-meeting or individual-instruction basis.

2. *If the instruction is to use class meetings*, these arrangements will be helpful:

a. At the beginning of the course the instructor may hand a student a definite schedule of the chapters in the text and the exercises or parts of the exercises that he wishes done. Or he may use the schedule included with the Alexander Library Exercises, in which the student may check what is to be done, subject to approval by the instructor.

The element of planning in advance is essential for keeping up the spirit of the work. If the directions can be given on the basis of letting the student select materials that he particularly needs or can be brought to see that he needs, it will furnish the strongest possible motive for good work on the exercises. For a student who really wishes to find something for his own purposes, library searching has all the fascination of tracking an elusive animal, of a treasure hunt, or of spotting the criminal in a good mystery story.

b. *If class meetings are held with all students doing the same exercises at the same time* the procedures may be planned together in the class and the exercises, when completed, may be discussed there. In the writer's experience, however, this does not give anything like so valuable training for students as does the same amount of time given to students in individual conferences.

c. *The exercises should be looked over*, checked for correctness or error, and handed back with written suggestions for bettering the methods, to be kept as part of the student's notes.

Many faculty members in teacher-training institutions at present do not know enough about library methods and sources to correct all the exercises. With the help of their librarians, who will be anxious to expand library service, they can correct the papers. After one such class, the instructor will need much less help from the librarian if he wishes to look after the correcting

himself. The librarian may give the course. The writer has for several years used his student assistants and secretary for much of this work, so that only final review and special points need to be looked over carefully by the instructor. The main thing is not to correct every tiny point, but to train students to know for themselves when they are right on their library work, just as people in ordinary life must know when the arithmetical work they need to do is accurate.

As with any exercises done outside of class, these are not bullet-proof against collaboration or copying by students. In these exercises, however, the danger of such things has been reduced to the barest minimum. When students have their attention centered on what is best for their own needs and on figuring out adaptations for this, they know that copying has no place in that scheme. As the exercises require keeping up to date, old exercises of former students will be of no help on many items, and moreover, old students will wish to keep their exercises close at hand. Also, no copyist can do much on the final examination. While copying has not been unknown in the writer's classes, it has been negligible and rather easily detected.

3. *If the work is to be given without class meetings*, which the writer considers to be by far the best way, it should be conducted as much as possible through books. A library course would certainly seem to be the kind to be conducted mainly through books, particularly as students read three times as fast as they can take notes in class. On this basis, the writer's experience indicates the advisability of the following procedures:

a. Careful written directions should be given students in advance.

For this purpose, the directions included with the Alexander Library Exercises, with such modifications as the instructor desires, may be used. Unless some such directions are issued, the course will give students the impression of failing to practice what it preaches. Moreover, such directions will greatly reduce the time needed for handling exercises.

b. It is a great advantage to have each student fill out: (1) An information blank similar to that accompanying the book of

exercises. (2) A *contract blank* also similar to that accompanying the book of exercises.

c. *For handling exercises*, it is highly desirable to have a definite place for students to leave their exercises and a file from which they can get their corrected exercises. Such facilities will save much time and minimize annoyance for the instructor and his helpers.

d. *It is unnecessary to mark students rigidly on every exercise* and to compute the marks minutely. The writer rates his own students on what they propose to do, on the general quality of their work in the exercises, and on their record on a final examination which may be taken at any time after the exercises are completed. He will gladly send any instructor using this text a copy of this examination, which will later be gotten up in several alternate forms from which one can be selected at random for any student. In his own examination work, he allows students to take the examination with their text, returned exercises, and any other notes they desire at hand, so as to approximate real library conditions. The main thing in giving the examination is to see how much a student can do in the allotted time, which so far has been about one hundred minutes.

e. *The instructor puts in his time* planning the work, looking over exercises, helping students at the psychological moment, seeing them individually, and giving them a final examination.

They can report at scheduled times, or come for help when they need it. Whatever time the instructor has to devote to the class may be spent in this way with the assurance that it will help the student to secure definite individual growth and results. With the ordinary class meetings, there would be much less assurance of this.

4. In the matter of *library facilities*, the library of any reputable teacher-training institution, or any library which especially serves educators, will be sufficient for a satisfactory course with this text and the exercises.

Any such library may lack some of the references given in the text, but not a great many. That list is a minimum and most librarians of such institutions will recognize the value of supply-

ing the materials lacking if their attention is called to the matter. Moreover, even though the library does lack some of the references, it is very likely to have other books which will be fairly satisfactory substitutes. In any event, *the more restricted the library's materials, the more skill the students need to get all possible out of that library.*

The main thing here is to make arrangements with the librarian so that students can have access to all materials when necessary. Every library will have a copy of the Cumulative Book Index, United States Catalog, and Publishers' Weekly. But if these are kept secluded in the librarian's office or in the cataloging room, students cannot do the exercises requiring the use of these tools. The simplest way to handle this problem is to arrange with the librarian to make the indexes available at stated times, or to admit students who bring special cards from the instructor.

5. *Call numbers or directions for locating references given in the text*, that are possessed by the library used, should be entered in that library's copy of the text. This copy should then be made available to students so that they may enter the call numbers and directions in their own copies of the text. Students will get plenty of practice in looking up call numbers for books needed by them individually. The references in the text are often to particular library indexes or tools about which the librarian will know offhand. One looking-up and entering of the data in a copy of the text will spare many classes of students a lot of useless drudgery. The time which would be lost in that way can be better employed by the student in profitable thinking and in growing in the ability to locate educational information and data of great value to him.

II. SUGGESTIONS TO THE INDIVIDUAL USING THE TEXT AND EXERCISES

The effective use of the combination can be greatly enhanced by following these suggestions:

1. *To use the text profitably.*

a. *Skim the text* as a whole, using the table of contents, the

chapter and paragraph headings, and, for topics of particular interest, the index. This will quickly give a bird's-eye view of the whole.

b. Then *read carefully Chapters I and II.* This will give a somewhat more detailed over-view of the contents of the book.

c. By using the *self-surveys of Chapter II or Exercises 1 and 2*, the reader can quickly test his previous knowledge of the contents and so be able to use his time and energy where they will count the most.

d. *References in the text* are cited with full bibliographical data but once, usually when first mentioned and just where they are most needed. Each reference is assigned a number and is thereafter referred to by number only. To find full bibliographic data for a reference when you have its number, locate its page through its number on the page facing page 1 of the text.

e. If the library has a copy of the text, see whether the *call numbers and directions for locating the references* have been entered in this copy. Taking off the call numbers in your own copy from the library copy will save you a great many hours that can be far better employed in thinking and in learning something of value about locating educational information and data.

2. *To acquire a particular knowledge or skill*, proceed thus:

a. Skim the chapters or parts of chapters treating the knowledge or skill.

b. Skim the appropriate exercise for mastering that knowledge or skill.

c. Then study the text parts of *a*, above.

d. Then do the exercise and have it corrected by the instructor or librarian, if possible. If one is working alone, he will have to do the best he can on correcting the exercise by referring again to the text.

By following these procedures, the individual worker will become independent in his library work, he will fix in his memory the desired information, or at least where to find it, and he will become master of the various library techniques. The author

knows of no way to strengthen the reader's library searching muscles except by having the reader do his own exercising.

3. *To use the exercises most profitably.*

See the general directions included with the Alexander Library Exercises, and for any given exercise, the directions at its beginning.

CARTER ALEXANDER

July, 1935.

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DIRECTIONS FOR USING KEY FOR LOCATING REFERENCES IN THIS BOOK

EACH reference cited in this book is listed with full bibliographic data but once, usually when first mentioned. Then it has its own number. Sometimes this listing comes immediately in the text and sometimes at the end of the chapter involved. This puts the references where they are most needed.

Whenever the same reference is later mentioned, this is usually accompanied by its number in parentheses, thus: (1) for a whole reference, or (1 : 250) for page 250 of the same reference. Use the key on the following page to find instantly the page on which the reference with that number will appear with full bibliographic data. Example: If (1) appears in the text or an annotation and is not clearly the number for a section, it means Reference 1, which the key instantly shows will be found on page 8.

References dealing with a particular chapter are naturally traceable through that chapter.

If you recall only the author of a reference, the organization issuing it, or title, as in the case of a library catalog or index, look up the name in the Index of this book. In this Index, any page entry with the symbol (r) means a reference with bibliographic data.

KEY FOR LOCATING REFERENCES IN THIS BOOK

Ref. No.	Page	Ref. No.	Page	Ref. No.	Page	Ref. No.	Page	Ref. No.	Page
1	8	40	101	79	119	118	208	154	239
2	8	41	101	80	119	118 _a	209	154 _a	239
3	8	42	101	81	119	118 _b	209	155	240
4	30	43	102	82	119	119	209	156	240
5	43	44	102	83	119	120	209	157	240
6	43	45	102	84	121	121	214	158	240
7	43	46	102	85	122	122	214	159	240
8	43	47	103	86	122	123	215	160	240
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11	44	50	103	89	138	126	222	163	241
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13	44	52	104	91	139	128	222	165	249
14	44	53	104	92	139	129	222	166	253
15	44	54	104	93	139	130	228	167	253
16	44	55	104	94	139	131	228	168	254
17	45	56	104	95	139	132	229	169	254
18	45	57	104	96	151	133	229	170	254
19	51	58	104	97	151	134	229	171	254
20	51	59	104	98	151	135	234	172	254
21	63	60	105	99	159	136	234	173	254
22	64	61	105	100	159	137	234	174	257
23	64	62	105	101	159	137 _a	234	175	257
24	64	63	105	102	182	138	235	176	257
25	64	64	105	103	182	139	235	177	259
26	64	65	107	104	182	140	235	178	259
27	64	66	107	105	182	141	235	179	260
28	64	67	107	106	182	142	236	180	260
29	79	68	108	107	186	143	236	181	262
30	79	69	108	108	189	144	237	182	262
31	79	70	108	109	193	145	237	183	263
32	79	71	112	110	198	146	237	For directions on using this Key, see pre- ceding page.	
33	89	72	112	111	207	147	238		
34	89	73	112	112	207	148	238		
35	89	74	117	113	207	149	238		
36	89	75	117	114	207	150	238		
37	90	76	117	115	208	151	238		
38	90	77	118	116	208	152	239		
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PART ONE
LIBRARY WORK AND THE EDUCATOR

CHAPTER I

THE EDUCATOR'S NEEDS FOR LIBRARY MATERIALS

I. PRESENT PREDICAMENT AND ITS CAUSES

THE alert modern educator well understands that, to be successful, he should know how to locate quickly in print or in libraries the information and data of greatest importance to him in practical field situations or in research.¹ On the other hand, he realizes that many of his efforts to do such locating may represent various stages of futility. These stages are clearly exemplified by: The Greek legend of Sisyphus rolling the great stone up the hill, only to have it roll down each time; the old English proverb, "It's ill killing crows with an empty sling"; the remark in Adam Bede, "It's but little good you'll do a-watering the last year's crop"; the political speaker's "tallow-legged dog chasing an asbestos cat through hell"; and the university professor's "milking a he-goat through a sieve." Whatever aspect of futility any one of these expressions gives, it states pretty accurately the true chances of many an educator at present to locate, in time to count the most, the library materials he needs for success in his work. So regrettable is this state of affairs that brief consideration of its four chief causes is worth while.

The *first cause* is that the needed helps on how to locate educational information and data have been either not conveniently accessible or simply not in existence. Many valuable helps on particular phases have been published, but in widely scattered places, often very difficult to locate, particularly after a year or so.

¹ Throughout, this book uses the two terms with these meanings: "The field" or "field situation" refers to on-the-job educators in contrast to those in training for such positions. "Research" connotes careful and intelligent investigation, whether part of the educator's professional training in some institution in connection with his field work, or work done simply to advance knowledge about education.

Moreover, these treatments have left great gaps in explaining how to use the library or in giving the information on educational materials that educators need. To remove this cause, is largely the purpose of this book.

The *second cause* of ineffective work with educational library materials is the tremendous number of printed resources from which the educator needs to select those most significant for his purposes. The Education Index alone will average thousands of entries a month, and even then it does not cover all important educational books and monographs, or all periodicals of importance to many educators. The other educational materials significant for educators must be run down through many other indexes and library aids. What is worse, the changes produced by the depression have made it necessary that educators keep up with outstanding developments in many lines about which it was not formerly considered essential for schoolmen to know. The mere number of the accumulations means that it is almost hopeless for any educator to keep up with those important for his work unless he definitely learns how to use an educational library effectively. Again, this book and the accompanying exercises are designed to give him such training.

The *third cause* is the frequent failure of college and university instruction to provide the educator with the knowledge and skills necessary for locating later the educational information he then requires. This applies especially to the areas he did not have time to master during his professional training as well as to those parts of his special interest which have since been rapidly expanding. Hurt, who has had experience in teaching the use of libraries, says, "College and university librarians are repeatedly astonished at the lack of knowledge of library technique on the part of students, research workers, and even on the part of instructors" (2:436).² In the same article he summarizes the results of a study made at the University of California and Stanford University which showed that even on very elementary library techniques,

² The first number inside the parenthesis cites the reference as given in this book. Use the Key opposite page 1 to find the page on which that reference will appear with full bibliographic data. The Key shows Reference I appears on page 8. The second number inside the parenthesis cites the page within that reference.

the graduate students at those institutions were very deficient. This is not surprising, however, when 62 per cent of them had never had any instruction in the use of the library and 68 per cent had felt the need of such instruction. From the present writer's experience with graduate students from all parts of the country, he would expect conditions in the two universities studied by Hurt to be much better than conditions in many other higher institutions.

The *fourth cause* is the fact that library science has been expanding too rapidly for many educators to be able to keep up with it. Consequently, unfortunate misconceptions have arisen regarding library possibilities. Some educators, because they have used books and libraries for years, believe they have nothing of consequence to learn about such helps. An examination of the self-surveys of library knowledges and skills given in Chapter II, Sections II and III, ought to remove this misconception. To some educators, work with library materials is almost wholly mechanical or routine drudgery, to be evaded if possible. Yet only adequate library searching can provide the necessary background for making sound practical educational decisions or for interpreting helpful research. Still another misconception is that a knowledge of how to use a library effectively can be acquired by talking or reading only. On the contrary, locating and using library educational materials profitably involves skills and techniques as definite and as susceptible of high improvement under properly supervised laboratory instruction, as are the skills and techniques connected with driving a car, learning to swim, or playing tennis. A book like this present one may spare the user many mistakes, but no amount of reading this book alone will do for him what significant laboratory exercises in the library can accomplish under competent supervision. Accordingly, this book has an accompanying set of exercises.

II. WHEN AN EDUCATOR NEEDS TO LOOK UP LIBRARY MATERIALS

The times when an educator, in the field or engaged in research, should look up library materials in order to achieve his

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aims are legion. Many of them will occur to him at once. Many will not. In any event, the number is so great that any mere enumeration of them all would be useless. It is far better to get some perspective by citing a few major instances under which many other minor occasions will naturally fall. Accordingly, this section lists and discusses five occasions which will cover most others of importance. The headings for these are purposely put in the second person so that you may apply them to your own thinking more easily.

1. *When you need to know what your problem really is.*

Much unnecessary and profitless library work comes from starting to attack problems without knowing what these problems really are. A good example is the so-called "Rural School Problem." The best educational thinker in the country can make no advance on this particular bit of vagueness until he gives it clear meaning and breaks it up into its distinct and understandable sub-problems. It may mean the difficulties involved in giving rural children as good schooling as city children. It may mean how to raise the money for such schools in rural areas that cannot finance such schools by themselves. It may involve ways of getting as good teachers in rural schools as in the cities. It may signify how to get larger school districts in rural areas. Whatever it does mean, that meaning must be clearly apprehended and defined before any profitable work can be done in finding a solution of the problem, with library materials or with anything else. For this clarification, usually nothing will help you so much as a rapid run through the right library materials if you know where to find them.

2. *When you need to find a problem really requiring work or research by you.*

With all that ought to be done in education, it is a great pity for anyone to waste his time and energy in duplicating something already adequately done. This holds for practical problems as well as for educational research. Take, for example, the common educational problem of getting a list of the important references on a current school difficulty. The writer has seen scores

of school men or women work for weeks, sometimes for months, painfully building up bibliographies for such a purpose. At the end, many a toiler's list was not nearly so good as any one of several bibliographies in existence when he began. Moreover, these bibliographies could have been located by him in as many minutes as he worked weeks, if he had only known where to look.

3. *When you need to secure data and information essential for solving your problem.*

This holds for nearly all practical problems. If you had such information and data on a problem, it would no longer be a problem for you. It also holds for most problems in educational research. In some experimental studies and surveys, the research worker gathers his own data. In some questionnaire studies he collects his own facts. But even in these studies, he often needs library materials to show trends, and practically always for comparison with previous researches. On about every other kind of educational research, much of the information and many of the data most useful for his purposes exist somewhere in library materials, published or manuscript. The knowledge of where to locate these materials exists in still other library documents, accessible to him if he only knows where to locate such documents.

4. *When you need to secure information required for interpretation of your own findings by comparison with the findings of others on a similar problem.*

Few studies, practical or research, can possibly have much meaning except as the results are interpreted in the light of the findings of other workers on the problems involved. Much the same holds for the methods of attack or of research employed—their scope and validity are often best determined by comparison with the methods used by others in similar studies. The place to locate these studies is in library materials.

5. *When you need to find out about methods of attacking your problem.*

In all work on an educational problem requiring more than

snap judgment and hit-or-miss methods, the worker, to be successful, must do certain things. He must isolate his particular problem, set up his study, prosecute it, interpret its results, and present them effectively. He may have covered all these procedures in some book or course on methods of educational research, and, when confronted with a need for them, will normally try to recall his knowledge from such sources. This may be all he needs to do for work on a field problem. Often, however, it is not sufficient.

This chapter has given an over-view of why and when the educator needs to use library materials. Chapter II follows this up with a treatment of the specific library knowledges and skills required for success in his work.

III. REFERENCES FOR FURTHER READING

Call
Numbers^a

1. Hurt, Peyton. "Bridging the Gulf Between the College Classroom and the Library." *Library Journal*, 59 : 748-51, October 1, 1934.

Discusses the need of coöperation between the classroom instructor and the librarian. Shows the need of definite instruction in how to use the library, caused by the present trend toward independent study.

2. Hurt, Peyton. "The Need of College and University Instruction in Use of the Library." *Library Quarterly*, 4 : 436-48, July, 1934.

Full report of the study mentioned in this chapter.

3. Shores, Louis. "The Library Arts College, a Possibility in 1954?" *School and Society*, 41 : 110-14, January 26, 1935.

Traces the history of certain of the trends noted in this chapter and predicts the future place of library work in the college.

^a Each reference cited this way, throughout this book, has a space for putting down the call numbers or other notations in respect to the place where the reference may be found in the library you are using. If the reference librarian has entered in her copy call numbers for all such references possessed by the library, enter the call numbers in your own copy from hers. If not, as you have occasion to use the references, enter their call numbers in your copy. Such entering will save you much time and energy when you later have occasion to use the same references again.

CHAPTER II

LIBRARY KNOWLEDGES AND SKILLS NEEDED BY THE EDUCATOR

I. MINIMUM ESSENTIALS

THE number of library knowledges and skills needed by the educator for success in his work is large. The two hang together so closely that hair-splitting *definitions* of them are unprofitable. It is sufficient here to regard a "library knowledge" as the information necessary for acquiring the corresponding "skill" in applying that knowledge to concrete situations. The "library skill," in turn, may be regarded as facility in applying to specific library activities the corresponding "knowledge."

This section groups the most important library knowledges and skills under four main headings. These will serve as a minimum list which an alert educator may consider acquiring. A fairly extensive list, however, can be made by combining the items given in Sections II and III of this chapter. Later chapters treat the various items in detail.

1. *Saving time and energy on the mechanics.*

This kind of saving releases just so much time and energy for the larger phases of any study, its thought and interpretation. Many a user of educational libraries wastes much time largely from such causes as the following:

- a. He goes to the library before deciding definitely just what is the purpose of the whole study or of the section on which information or data are desired.
- b. He starts to hunt references without sufficient thought about where they are most likely to be or how he may best use them. In consequence of either or both of these two unwise procedures, he spends much time in waiting and flitting

about because he lacks knowledge of the time- and labor-saving devices regularly employed by successful library users. For example, they plan so they can clear up all the work which can be done in one part of the library, before moving on to another place. He "kicks himself along" with the idea that, as the references pile up, he is making progress. In reality this is no more true than it is in statistical work when an investigator tabulates a thousand useless cases. He tends to substitute the "soothing routine" of bibliographic work for hard, clean thinking on what the library may contribute to his study. He gets bogged down in bibliographic entries because he has not kept his perspective by the "high-spotting" method of securing references, both for the whole study at the start, and later for each section.

Lack of knowledge of how to save time for the higher thinking required in an *educational research* often results in the effort's being no more than a routine bibliographic job. To produce such a list of references takes much work, but it is a kind of "ant" work. It resembles the industry, persistence, and mechanical activities of termites rather than the profitable human thinking and interpretation expected in a good research. The same lack results in all too numerous studies in which the bibliography was obviously worked up after the study was made and consequently could have had little or no influence on the thought involved. The proper function of a bibliography in a research is to give the researcher stuff with which to do the necessary thinking and the reader citations with which to check the other's thought.

2. *Securing a satisfactory bibliography.*

Any educator needing library materials on a problem wishes as early as possible to have a *bibliography* on it that will satisfy his wants. He cannot secure this unless he knows about the specific purposes for which a bibliography is used and what constitutes a good one for various needs. He needs to know whether he requires a supporting bibliography, or one for further study, or one for readers unfamiliar with the area, or a selected bibliography, or an up-to-date one, and so on.

When such matters have been considered and the exact type of desired bibliography settled, the worker needs to know how to find quickly any such existing list of references. If there is none in existence, he needs to know how to make up rapidly one that will suffice for his purposes. In either case, the worker ought to understand how to scout for references, keep them organized, and make up his final bibliography. If he is engaged on a research, he should in addition know how to make up an exhaustive bibliography of all the important references in the field of his research to date.

If the worker is to keep his *perspective in accumulating references*, he must be able to get up quickly a short bibliography that will "high spot" all important subdivisions of his whole problem at the outset, and of any section when he concentrates on that. Otherwise he will be smothered with the mass of references involved, or fail to cover important areas of his study or of a given section.

Knowledge of how to do as *exhaustive a bibliography* as possible for the time-spans involved in a particular research or in some section of it, is necessary for several reasons. Without it, avoidance of duplicating other research is difficult. Without it, also, the researcher cannot be sure his methods of attack are sound or know what his findings really mean.

To do successfully either a "high spot" or an exhaustive bibliography requires at least *four specific knowledges and the corresponding skills*. The worker must know how to draw up headings under which to look for references and this in turn requires knowing where to get initial lists of headings. He must all the time know the likely sources of the needed information and data, or the references that will tell him how to use them with profit and dispatch. He must know acceptable bibliographic forms that will be useful to him throughout his study and that will not necessitate too much rewriting in the final bibliography for his manuscript or publication.

3. *Doing efficiently the different kinds of reading required.*

Under the best of conditions, use of the library requires so

much reading that no educator needs any urging to *cut* that *reading down wherever possible* without loss of efficiency. Often, however, even when he has been using libraries for years, he does not know the ways to do such cutting. For example: Rapid scanning of bibliographies to "spot" promising references; equally rapid scanning of a book or article to see if it is worth noting as a reference; rapid skimming of a reference to get the run of it and to note the parts worth careful perusal; and severely critical reading of important passages with due care for their setting and comparison with other documents in the same field.

Knowledge of when and how to use *sampling and short-cuts* is as essential in the reading phases of a study as in a statistical investigation.

An extended discussion of the kinds of reading useful in work utilizing the library, appears in Chapter VIII.

4. *Efficient note-taking.*

Accurate and effective library reading requires certain knowledges and skills in note-taking, such as: When to take notes, particularly so as not to interfere with profitable reading; how to take notes on reading and references; how to keep notes organized for effective, easy, and rapid use at any time; and how to prevent the mechanics of note-taking from interfering with the thought and interpretation aspects of the study.

For a full treatment of note-taking in connection with library materials, see Chapter IX.

II. SELF-SURVEY OF LIBRARY KNOWLEDGES NEEDED BY PROFESSIONALLY ALERT SCHOOL WORKERS IN THE FIELD

This is a sample list of items of library knowledge needed by school workers in the field. In addition, many of the items in Section III following are equally valuable for field workers in connection with their major interests.

Directions: In looking over these items, ask yourself this question on each: "*Do I know how to find quickly by myself, so that I will not have to hunt up or wait for any particular library attendant and so can work profitably in any library at any time, the answer to this question?*"

If you plan to do Number 1 of the Alexander Library Exercises to accompany this text, you do not need to mark the questions here.

1. Where can I find the significant facts about a community or an institution in which I would like to work or apply for a position?
2. Do I know which kinds of library reading are almost a waste of time?
3. Do I know how to increase my speed in reading?
4. Do I know when and how to skim in library reading?
5. How can I find quickly such often-needed practical information as:
 - (a) The requirements for voting in an adjoining state?
 - (b) The rules for displaying the American flag under all conditions?
 - (c) The words for the Salute to the Flag, commonly used in school?
6. Do I know how to locate quickly articles in non-educational periodicals at different dates?
7. Is there in existence a guide to the professional literature of my field? If so, where is it and how may I secure a copy? If there is no such guide, what ought to go into one so that I may keep my eyes open and in the course of several years gradually build one up for myself?
8. How can I discover the magazines that carry regularly departments of special interest in my major field?
9. Which encyclopedia is best for use in my major field?
10. Which are the most useful three reference books for my major field?
11. What are the most important three periodicals in my major field?
12. Which series of publications of the United States Office of Education is of most interest in my major field? What things of value in it can I count on securing?
13. Where can I find immediately the names and addresses of officials of the National Education Association for any given year? For example, the general secretary, the secretary of the department in my field, the director from my state?
14. Where can I, at any time, find immediately the name of the specialist in the United States Office of Education who would be most serviceable to me in my professional work?
15. Which yearbook as a series, and which number of this yearbook, are most significant for my major field?
16. How can I find out for my state, such things as these:
 - (a) How many hours constitute a full public school day?
 - (b) Can a public school board dismiss a woman teacher for marrying?
 - (c) Is Armistice Day a legal public school holiday?
17. How can I keep up with prospective educational legislation, federal and state?
18. Do I know how to find the address of the publisher of any book, no matter when published? Of any periodical?

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19. Where can I find whether there is a new edition of an old book, or the price of a book?
20. Where can I find a list of all the books, including textbooks, by any given author, and how can I bring that up to date?
21. Where can I find a list of all the textbooks available for work in a given subject at a given level?
22. Where can I get immediately full bibliographic data on several texts which have been listed with only a few necessary items in the advertisements which called them to my attention?
23. Where can I find names and publication data on recent courses of study of interest to me?
24. How can I find the last number of any given yearbook, say the one on supervision, no matter what time of year the question comes up?
25. Do I know how to find illustrations for school or thesis purposes, such as a picture of bamboo or a colored one of Japan's flag?
26. Can I find a poem on a school topic or interest, to use in an address or for some special educational occasion?
27. Do I know where to find immediately, at any time of the year, the opening dates for the coming or present school year, for the state university or leading higher educational institution of my state?
28. Where can I find the meaning and proper use of a very recently introduced word like "gadget" or "boon-doggle"?
29. Where in the library could I quickly get the name and address of a schoolman when I knew only the position? For example, the superintendent of schools at Detroit, Michigan? The principal of the Peddie School for Boys? The clerk of the board in Portland, Oregon? The director of the summer school in the University of Alabama? The president of Drake University?
30. Where in the library would I seek a brief biography of a noted living educator? A noted contemporary European statesman? A former American lawyer now dead? A current United States cabinet member? An ancient Greek poet? Some minor living educator?
31. How would I locate a source of brief biographies of those who have achieved contemporary success in the theatre? In the Central States? In New York City? In Norway? In science?
32. Where in the library could I quickly find what education the following had: A certain European dictator or national leader? An ex-president of the United States? A contemporary leader in American politics? A contemporary leader in British politics? A man known throughout the world?
33. How would I proceed in the library to find biographical data concerning a notorious person who did not have the qualifications for inclusion in the usual sources of brief biographies?
34. How could I find in the library an account of a recent disaster? A re-

cent educational speech? The theme of an educational association's meeting held two years ago? A speaker at a convention held about six months ago?

35. Which journal contains news notes of interest to me in my field? Which one has the best personal news notes for the same?
36. Where can I find the statistics that "count" in my major field?
37. How can I find the author and complete poem beginning:
 "Men look to the East for the dawning things"?
38. Where can I locate quickly a quotation: On the value of thoroughness in school? Containing humor regarding educators? Appropriate for a talk on the social responsibilities of teachers?
39. Do I know how to locate quickly in a library pictures of such diverse sorts as these: The most recent published portrait of Charles H. Judd or some other prominent educator? The "Man with the Hoe"? An allegorical representation of education? A schoolhouse in colonial days? A schoolhouse recently erected in New York City? Socialized recitation? Nursery school practice? The International House at the University of Chicago?
40. Do I know how to locate quickly a portrait of a former president of the United States? Noted educational leader now dead? The present head of education in the United States Federal Government?

III. SELF-SURVEY OF LIBRARY KNOWLEDGES NEEDED BY EDUCATIONAL RESEARCH WORKERS

This is a sample list of items of library knowledge needed by practically every doctoral candidate for successful work on his research or report. Most of the items are also applicable to all persons prosecuting educational researches of any kind.

Directions: In looking over these items, ask yourself this question on each: "*Do I know how to find quickly by myself*, so that I will not have to hunt up or wait for any particular library attendant and so can work profitably in any library at any time, *the answer to this question?*"

If you plan to do Number 1 of the Alexander Library Exercises to accompany this text, you do not need to mark the questions here.

41. Do I know what decisions must be made in planning work with library materials?
42. Do I know how to do the kinds of reading necessary in successful research with library materials?
43. When is it advisable to use assistants in library reading?
44. Do I know how to do the fast scouting necessary in the early stages of making a bibliography?

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45. Will my proposed study seriously duplicate previous work?
46. How can I find out whether my problem is being worked on at some other institution?
47. Where can I find a treatment of the heads under which to draw up an outline for my proposed research or dissertation?
48. Do I know how to draw up a schedule of the kinds of library materials I shall need on my problem so that I shall not miss any important sources?
49. How may I make up a list of headings so that I shall not miss valuable references on my problem simply because I do not know where to look in the library resources I consult?
50. What are the best indexes for periodical materials on my problem?
51. Do I know the headings under which to look for materials on my problem in the Education Index or any other index for periodicals?
52. At any given date, which numbers of the Education Index must I use to be sure of covering all it has to contribute on my problem?
53. Do I know how to locate materials on my problem most expeditiously in any kind of book likely to bear on it?
54. How can I complete references that were not full enough in the forms in which I first found them, but must be full for my purposes? (For example, the first forms may not have the publishers, prices, numbers of pages, or dates.)
55. How can I locate a research on my problem from the following typical fragmentary data? I have a recollection of seeing the article and know about what it contained, but I don't know who wrote it, just when it was published, or which periodical had it.
56. Do I know how to save time on the mechanical phases of work with library materials?
57. Do I know how to locate bibliographies on my problem:
 - (a) A brief over-view one?
 - (b) A complete one?
 - (c) One covering periodical articles?Do I know how to bring these up to date?
58. How can I take down references so that I shall not have to do much of the work over again?
59. Do I know how to read in dealing with a typical "problem" situation?
60. Do I know how to read for critical review or evaluation of a reference?
61. Do I know how to locate the most recent book on my problem?
62. How can I locate data on an extremely recent book on my problem when the data I have found so far are very incomplete and probably inaccurate?
63. Do I know how to write up in acceptable final form references of all kinds of library materials that I originally found in all sorts of forms?
64. How can I locate library materials that will help me to evaluate for

work on my problem: An old educational book? An old non-educational book? A recent educational book? A recent non-educational book? A textbook? An old periodical article? A recent periodical article?

65. In work on my problem, in what law books should I look to locate:
 - (a) Statements of educational principles (much law represents "crystallized custom")?
 - (b) Data on aspirations and ideals (some legislation represents only aspirations and ideals)?
66. How can I locate the statistics that "count" on my problem?
67. How can I locate for my problem a brief history, or a full history, and find materials for bringing these up to date?
68. What indexes should I use to be sure of covering all the resources of the United States Office of Education for my major field or for my problem, at any necessary dates?
69. If I wish to use a bound volume of a periodical after I leave this library, how can I find which of the libraries near me will have this periodical?
70. Which indexes should I use to be sure of covering all the resources of the publications of the National Education Association for work on my problem?
71. Where can I locate government documents (federal, state, or local) pertinent to my problem, published at different dates, say before 1900, from 1910 to 1920, or within the last month?
72. Do I know how to set up a good system of note-taking in connection with my dissertation, including a checking-up and evaluation on my present practice in taking notes?
73. Do I know whether the periodicals that "count" on my problem are indexed in the Education Index? (If they are, that index will save me much time over consulting unbound copies or annual volumes of the periodical.)
74. Do I know how to locate quickly periodical articles on education published before the Education Index started on January 1, 1929?
75. Do I know what is the meaning of commonly used signs in proof-reading, such as: δ ? \square ? stet? #?
76. Where can I find copies of old periodicals that the library I am using does not have?
77. Which series of the publications of the National Education Association is of most interest to me on my problem? Where can I find, or get the data for building up, a list of the numbers in this series that will be up-to-date and also include numbers scheduled for the future?
78. Which number of each of the following can be counted on regularly to have recent references on my problem: Elementary School Journal? School Review? Review of Educational Research?
79. Just what do I have to do and what do I have to pay, in discovering

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and borrowing a book on my problem available in other libraries but not here? How do I find which other libraries have it?

80. Where can I find the changes in title of the United States Office of Education at different dates so as to know which title to take in searching within a list for references at a given date?
81. Do I know the meaning of abbreviations commonly used in published researches, such as: *cf.*, *L. S.*, *op. cit.*, *supra*, *vid.*?
82. If my problem requires a questionnaire, where can I get a list of names of likely persons to send it to? If non-educational names, such lists as those of civil engineers, government officials, or health officers? If educational names, such lists as those of city school supervisors, deans of schools of education, directors of bureaus of educational research?
83. What order of procedure is best in a study with library materials?

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For *practice* which will give you a list of the specific library knowledges and skills you now need to acquire, use Number 1 of the Alexander Library Exercises. To secure a good perspective of the library knowledges and skills needed by you as an educator, use Number 2 of the exercises.

PART TWO

GENERAL LIBRARY SOURCES AND TECHNIQUES

CHAPTER III

INTELLIGENT PLANNING IN SEARCHING FOR LIBRARY MATERIALS

I. IMPORTANCE OF INTELLIGENT PLANNING

Failure to plan for a library search often results in a tremendous amount of unnecessary mechanical work because the procedure is essentially that of the following story. A policeman at Madison Square (23rd and Broadway) in New York City one evening saw a man evidently searching for something, looking under benches, poking in the shrubbery, and the like. Upon the policeman's asking what was lost, the man said it was a watch. "Where did you lose the watch?" "At 39th and Broadway." "Well, why on earth are you looking for it down here at 23rd?" "Oh, Mr. Officer, you don't understand. It's dark up at 39th, but it's so light down here." Many persons dash out to seek library materials on their problems where it is light, that is, where there are many references. Even a little reflection would wake them to the fact that the "watch" or particular references they seek, could not possibly be where they are looking.

If genius is "one-tenth inspiration and nine-tenths perspiration," searching for library materials is not exactly a genius activity. At its best, such searching requires at least fifty per cent brain work and not more than fifty per cent mechanical labor.

II. TYPICAL DECISIONS ADVISABLE AT THE START OF THE SEARCH

To plan profitably a search for library materials on a problem, it is highly advisable at the start to make *four decisions* in the order here given: First, just what sort of work in the library do you need to do? Second, what kinds of library materials do you require? Third, just where are these materials most likely to be

found? Fourth, how can you save time and energy in locating and using these?

1. *What sort of library work?*

For the *sort of library work*, you ought early to decide such typical matters as these: Are you seeking a specific item of information such as those listed in the self-surveys? Do you wish merely to browse? Do you need to read to find a problem? If you have a problem, do you need references on all its phases or only on some special aspects? Do you need to work up a history of developments in the field of your problem? Do you need data to solve your problem or some subdivision of it? What kind of data are you seeking? For what years do you require descriptions, summaries, or statistics? This last involves such questions as these: Do you need only the most recent data or those for the whole sweep of a given period to be settled by you? Can you achieve your aims by taking cross sections or samples, and if so, will the census years ending in zero be sufficient for the sampling? Do you need on any item to take the average figures for several years? For example, you might in dealing with school expenditures in small systems. These expenditures vary so greatly on the proportion of moneys expended upon buildings that the figures for any one year are often not reliable.

2. *What kinds of library materials?*

On the *kinds of library materials required* for your problem, you need to decide such matters as these: Will a bird's-eye treatment be sufficient for your purpose? Ought you to get the most important references covering the whole field of your problem? Do you require an exhaustive bibliography on some narrow phase of it? Do you need primary or secondary sources, popular or technical treatments, authoritative analyses or researches?

When you have settled such matters, you have still more specific decisions to make, such as these: Do you need to consult books, periodicals, newspapers, government documents, or publications of private institutions? If you need books, are these reference books, textbooks, or some other classification of books? Do you require current or old periodicals, newspapers, and documents?

3. *Where will the materials be found?*

Success in your preliminary decisions as to just *where* your *desired library materials* are *most likely to be found*, will depend upon your knowledge of a great variety of sources. You can never have too much of such knowledge for purposes of such decisions, whether you acquire it from this book or elsewhere. However, in any planning for library searching at any stage of your career, you have to start with whatever information on sources you then possess or can acquire quickly. On this basis, one specific and one general suggestion can be given here.

The *specific suggestion* is this: For help in locating each important kind of library material, use the chapter headings in the table of contents of this book. Start by examining the headings and thinking which chapter is likely to contain information on the kind of material desired. When you have selected the most likely chapter, run through it rapidly for specific hints.

The *general suggestion* is to look at the library searching from the standpoint of the references themselves. For help here, a certain story is useful. Deliberately recalling this story is especially helpful on those numerous occasions when the searcher starts out with only the barest clues or hints about the materials he feels sure will in the end be the most valuable for his purposes.

A horse strayed from an English village, and all the men save the village idiot went out and searched for hours. When they returned, worn out and unsuccessful, the idiot said he would find the horse. To the amazement of all, he shortly returned with the animal. When asked how he did it: "Oh, that was easy. I just thought if I was a horse, where would I go. And I went." And he had. That is, in the library, a very ordinary person who will seriously *look at references from the viewpoint of the references* and the data, will have a good chance to find them. But the most brilliant searcher who starts out to hunt hidden references, thinking only of himself and his needs, unwilling or without the knowledge to put himself imaginatively in the position of the publications or manuscripts, will be no more apt to find them than the normal villagers were to locate the horse.

The practical value of this general suggestion will be clear

from an actual experience of a high school principal who needed to locate a study of two entering groups at Stanford University. All he then had was a vague recollection of having read a review of the study sometime between 1925 and 1930. By recalling "the horse story," the writer successfully predicted the place to find the reference, as follows:

Under questioning, the principal felt sure the study must have appeared in a periodical. He decided that he must have read the review during attendance at a certain summer session. This date indicated probable appearance of the article before the Education Index (51) started, also little likelihood of the article's being buried under some heading of that index which he had overlooked. As the study apparently had been a technical one, the writer predicted that it must have been listed in the International Index (54). This was based on two facts. Before the Education Index started, the International Index carried technical articles on education. Moreover, the principal had combed the Readers' Guide (60). Accordingly, the principal went to the International Index, using four tentative headings. He had to consult several volumes because he was not sure of the exact date. The right volume quickly turned up the reference under his fourth heading. The actual time required, once the volumes of the Index were obtained, was less than half an hour. He had tried for some years without success to locate this reference, sometimes having the help of library assistants.

To make the prediction, the writer needed no information beyond that easily accessible in this text.

4. *How save time and energy?*

Your decisions on saving time and energy should take into account the following suggestions:

a. *Work backwards* from the present date, on securing references. This plan often prevents much duplication. Later bibliographies are apt to cite earlier ones and many of the same references.

b. *Secure outstanding references covering all the important aspects of your problem before you read them.* You are exceed-

ingly liable to lose time if you start reading references on a given phase before you have glanced through your available titles on it. Often this glance will show you that some of the references are duplicates and that a later reference sums up many earlier ones.

c. Plan what is to be done at a given place and clean it up before going to something else. This is not always possible, but it saves much time and effort when it is. Examples are: Getting all likely references in a given periodical index before you leave it, going through periodicals, finishing in a particular library, and making all your selections from a given bibliography.

d. Take down all available data on a reference when you make your first copy of that reference. Going back to get correct spelling, number of pages, date of publication, and the like, will take many hours of time if you have any material number of references. On a large bibliographic undertaking of the writer where he could be with the staff only a portion of the time, failure of assistants to follow this prescription, despite all his cautions and exhortations, increased the work at least twenty per cent.

e. Observe library etiquette and the rules of your library. Just as the observance of social etiquette, in the long run, saves time and avoids useless difficulties with other people, so does the observance of library etiquette and rules save time. Ascertain the rules of your library in regard to the use of any material which you may need in your work. Many libraries have a leaflet or booklet of rules and directions for the use of the library. Examples of such consideration for others are: Returning a book as soon as you are through with it, even though you can keep it out a week longer under the rules. This is particularly necessary where your fellow students are using the same books on the same work as yourself. Returning a reference book—libraries differ on practice here. You may be expected to put a reference book back on the shelf, or to leave it to be replaced by an attendant. The point is to return the book as near to its regular place on the shelves as the library instructions permit.

f. Avoid wasting time at the loan desk. Many libraries require fifteen minutes or more to secure a book from the stacks. If you

require stack books, plan to avoid idle waiting or "time killing" while your books are being located by the library attendants. If you use stack books frequently, try to get a general permit giving you access to the stacks. If you do not have such a permit, bring along work to keep you busy while waiting for books. If you have a special desk or table, try to have the books delivered to you there. Some libraries will do this for you in advance.

g. *When unable to find a book in its proper place in the library*, report the matter to the librarian and begin work on something else. Because you will encounter this difficulty frequently, you should always plan to have other work to do while waiting for the librarian to locate the misplaced reference.

III. MOST PROFITABLE ORDER OF PROCEDURES IN A STUDY WITH LIBRARY MATERIALS

In any planning for a specific piece of work in the library, you at once encounter two problems: What procedures are advisable? In what order should these be undertaken? You will not be able to understand fully or solve these problems until you possess library knowledges and skills fairly equivalent to a mastery of this text and the accompanying exercises. But you can gain considerable from a bird's-eye treatment here, and in any event you will frequently need some kind of check list of desirable procedures in the most profitable order, to help you plan your library activities.

The best list is one for a research involving library reading. This list can be used for non-research reference hunting by dropping out the steps here unnecessary. On this basis, a complete research would involve the sixteen procedures given below. Opinions may differ as to the order in which they may most profitably come. The order here given is that which the writer's years of experience have indicated as most desirable in *nearly* all cases.

CHECK LIST SHOWING MOST PROFITABLE ORDER OF PROCEDURES IN A STUDY WITH LIBRARY MATERIALS

1. Reading to locate a problem.

This step is often unnecessary, particularly with a field problem.

2. Making sure there is no duplication of previous studies.

This applies to most studies. Why work out the whole problem when it has been adequately solved before? Begin where the previous worker left off. Of course, one should not spend excessive time on this phase unless he is working on an extensive research, such as a doctoral dissertation.

3. Getting techniques on delimiting and setting up the problem.

This is often necessary on field problems and practically always on researches.

4. Deciding the kinds of materials on the problem needed from library sources.

5. Deciding headings for locating materials.

6. Selecting bibliographic forms to use in taking references.

7. Making a high-spot bibliography.

8. Conducting an exhaustive search for references.

This is necessary only on the more elaborate researches.

9. Setting up an index for filing references.

This is necessary for any kind of study that involves any considerable number of references.

10. Filing references.

11. Locating the library materials corresponding to the references.

12. Skimming references.

13. Selecting certain references for closer study.

14. Reading references, especially the selected ones.

15. Taking notes on readings that bear on specific phases of the study.

16. Annotating references.

This applies only to the final bibliography.

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For *practice* to give you a pattern of planning useful in many of your future searches for library materials, use Number 3 of the Alexander Library Exercises.

CHAPTER IV

HEADINGS FOR SEARCHING

I. NEED FOR A LIST OF HEADINGS *BEFORE* SEARCHING FOR REFERENCES

IN COLLECTING library references on any problem or topic, it is highly desirable to make at the start a list of tentative headings under which to search. Without such a list one always runs grave risk of overlooking good materials, often the very best, because of not knowing under what heads to look in the indexes or catalogs to be used. This is true of the best index and even truer of the poorer library tools of this class. For example, one of the author's students found in making a guide to the literature of penal education that references in this field were listed in nine commonly available library indexes under ten headings, only five of which appeared in as many as five indexes.

A special difficulty arises in educational references because of *rapid changes in terminology*. For example, many items formerly indexed under Measurements or Standard Tests must now be sought under Achievement Tests, Intelligence Tests, Aptitude Tests, and the like.

To put it another way, *any library index classification follows the mental processes and habits of the chief compiler involved*. He may have adopted the standard practice of some library association, for example, referring from general to specific headings, but not the other way around. Or he may be a strong individualist. In any event, one cannot tell offhand where he would be likely to put certain references. Such difficulties in heading variations increase as one uses more indexes or consults the same index in editions published years apart with possibly different chief compilers.

To attain any given quality in a list of references, a *preliminary*

list of headings saves a great deal of time and energy. It enables one to clean up his work with an index when he has it. Such a list also gives the psychological advantages of early outlining. When one outlines a problem at the start, few materials of value on it can come within his range without his noting their pertinency. He will constantly be noticing possible sources in lectures, in casual reading, in conversation, and in all his serious reading. If he had not made the outline, he might not notice the possible pertinency at all, or might recall the references so imperfectly as later to be unable to locate them.

II. HOW TO MAKE A LIST OF HEADINGS

Before starting on the list itself, get clearly in mind just what the problem or topic is and just what kind of bibliography is desired. Making a rough outline on paper of the limits needed will prevent great waste of time and energy and keep you from getting off the track. Specifically, you need to reach decisions on such matters as those listed in Chapter III, Section II, subsections 1 and 2.

In making any such list, the *start* is the hardest part. If you can secure a list which you can later modify, the start will be much easier. Taking someone else's list at the outset gives you a distinct psychological advantage, for it stimulates you to think of other possible headings. If the list you take has been prepared by some librarian, all the better, since a librarian is apt to give headings used in library indexes and to cover the field fairly well. Fortunately, we have such a list in Voegelien's List of Educational Subject Headings (4). The author of that book knew the problems involved, for at the time she was librarian of the Bureau of Educational Research at Ohio State University and doing the work for a classification committee of the National Education Association. As she was later the first editor of the Education Index (51), her headings fit in easily with those of that index.

To add to the headings of the Voegelien list, which is getting somewhat out of date, use other lists, include the names of likely authors, and be on the alert for new terminology. The extension through other lists is best managed by taking a rapid run through

the Education Index for any recent annual volume, and possibly through a library card catalog. The Education Index lacks Voegelien's advantage of having all the headings in one place where the user can keep his perspective, and entails much more work. A library card catalog kept up to date may have newer terminology but requires hundreds of drawers, some of which are certain to be in use or misplaced when you wish to use them. Not kept up to date, such a catalog is of little value here. The addition of likely authors is particularly desirable in dealing with "on the fringe of education" topics. As examples of new terminology, consider Extra-curricular Activities, Activity Programs, and Panel Discussion. The first is thoroughly established with numerous subheadings in the Education Index (51). The second appears as a heading regularly but has only the subheading of Bibliography. The third has not yet reached the dignity of a separate heading for references of its own.

III. REFERENCE FOR FURTHER STUDY

For a brief discussion of the procedure successfully used in preparing a list of educational headings, see:

Call
Number

4. Voegelien, L. B. List of Educational Subject Headings, p. vii-xiv. Columbus, Ohio: Ohio State University Press, 1928.
(Described previously in this chapter.)

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For *practice* to give you knowledge and skills in locating headings that will save you much time in future library searches, use Number 4 of the Alexander Library Exercises.

CHAPTER V

REFERENCE BOOKS

I. VALUE OF REFERENCE BOOKS TO EDUCATORS

THE schoolman who knows when and how to use reference books can get much better answers to his questions in much shorter time than can one who has not this knowledge. The tremendous advantages possessed by the former educator may be shown by a *list of topics* on which the reference books of any good library will promptly supply information. The following list came from skimming the subject entries in the reference card file at Teachers College, Columbia University. Practically all the topics would be covered by the reference books of any good educational library. Many of them would be covered by those of any public library. The brief list thus quickly obtained covers: Abbreviations, Actors, American Education Week, Bible, Biography (over twenty "Who's Who" books for various groups), Current Events, Customs, Dissertations, Etiquette, Holidays, Illustrations, Letter-writing, Names (Geographical and Pronunciation), Newspapers, Opera, Poetry, Political Parties, Portraits, Private Schools, Prohibition, Pseudonyms, Quotations, Statistics, Stylebooks, Synonyms, Toasts, Undset (Sigrid), and Unemployment.

II. VALUE OF KNOWING HOW TO USE REFERENCE BOOKS

The efficient schoolman knows and can give quickly the facts and citations about his professional work that he can reasonably be expected to know offhand. On far more matters he is merely expected to know where and how to find the desired information quickly. For *speedy action* in his work when it counts the most, reference books are indispensable. They are also valuable for securing the facts he is expected to know offhand.

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To be regarded as efficient, any schoolman must be able to give readily such things as the following: If a superintendent, the percentage of school expenditures on total municipal expenditures for the local community and for comparable systems. If a high school principal, the proportions of boys and girls in the local school and in comparable schools. If a teacher, the best text for her field, the best treatment of the relation of the field to other fields, and the best treatment of methods of teaching.

The best way to attain the knowledge of things you are expected to know offhand is to keep a loose-leaf "knowledge book," arranged alphabetically by topics.

On the page devoted to a topic, enter the facts needed to be memorized. They may be written down, or clipped and pasted. The size of the book will depend on the situations in which you must use the information. If you must always have the facts with you, a pocket-size book is best. If you need them at your desk, a larger book can be used. The facts can be secured from reference books, newspapers, records, and so on, and entered in the "knowledge book." By the mastery obtained in making up the book itself, by reviewing at odd times, or by referring to the book at times of need, you will soon have the things you need to know offhand so fixed in your memory that you will seldom have to refer to the book. At this stage your stock for efficiency will be at par with citizens and taxpayers who expect you to know at once the facts they ask for.

A schoolman, to be efficient, needs to know how to select and use reference books himself. Of course he will get all the help he can from the reference librarian in whatever library he is using. But if the schoolman does not know the main points in selecting and using reference books himself, he will often find himself balked, unable to work at the time he has set aside for the job, and especially unable to produce results when they count the most. For example, the reference librarian may be ill, off duty, or too hard pressed to find sufficient time for him when he needs it. He may start with one librarian and the next time have to work with another or a less able substitute. He may find things given him incorrectly or out of the setting necessary for a

clear understanding of their meaning, matters which only he can settle.

If the schoolman himself knows how to select and use reference books, he has an advantage similar to that of a country-reared boy over one brought up in a city apartment. The country boy has a resourcefulness due to his having had to do so many things for himself, not possessed by the city boy accustomed to having many things done for him. A country boy has no trouble in adjusting himself to having things done for him by others in the city, but the city boy often finds it hard to get along in a country situation demanding constant personal resourcefulness. Many of the schoolman's most important problems, and especially his emergencies, *demand the country-boy type of resourcefulness with reference books.*

III. TYPES OF REFERENCE BOOKS IMPORTANT FOR EDUCATORS

Reference books tell the story of "things as they are." They furnish the educator with explanations, descriptions, and facts necessary for accurate, speedy, and easy solutions of his problems. Reference books are of two kinds, general and limited. General books, such as dictionaries, encyclopedias, and almanacs, cover the whole range of all his interests. Limited-field reference books specialize by class of item or by subject. Examples of books specialized by item are atlases, biographical lists, directories, and compilations of quotations. Examples of those specialized by subject are yearbooks, cyclopedias of painting or religion, and dictionaries of political economy or philosophy. In addition to the foregoing, without reference to classification by kind, there are anthologies, commentaries, compendiums, concordances, epitomes, gazetteers, guidebooks, handbooks, manuals, phrase books, source books, syllabuses, and tables. Those reference books especially useful to the educator are defined and treated in later pertinent chapters. For other reference books, use the references at the end of this chapter.

For each specific problem of the educator there is usually *one best type of reference book*. To help you select the best type for any

particular problem, the following notes are given on the types most useful to you.

For all *problems concerning words or phrases*, the best reference books are *dictionaries*. They give help on spelling (acceptable and preferable), on pronunciation (permissible and preferable), on correct usage, and on meaning (preferable, permissible, and possible). The information in a dictionary enables you to think more accurately since you have better meanings for words. The October 1934 Subscription Books Bulletin (106) reviews and evaluates carefully some forty-five dictionaries then available.

For a *well-rounded treatment of a topic* and all that is back of it, not merely the meaning of a word or phrase, *encyclopedias* are the best reference books. An encyclopedia article gives a bird's-eye treatment of its topic and hence is excellent as the first reading on that topic. It gives a description, an explanation, or an exposition of the matter. It will almost certainly have something on the history, current status, and organization of the topic, as well as a brief bibliography and significant statistics up to the date of printing. Many of the articles, being written by specialists, are authoritative for statements of theory. Their evidence phases have to be sound because encyclopedias are used so widely and for so many years that no publisher would dare issue unsound treatments if he could avoid it.

It is inevitable that any encyclopedia will get out of date, but the best ones have annual supplements.

Note that in encyclopedias you secure ideas, theories, hypotheses, suggestions, information, meaning of facts, all stuff to think with.

When you need *facts*, you are most likely to find them in some kind of *yearbook*. A yearbook will give facts to use, but not their meanings directly. In using such a book, you have to know you need the fact and for what you need it. This is in contrast to the situation with an encyclopedia. With the latter you do not have to know what fact or facts you need at the given stage; you may simply know that you need to "find out about something." Yearbooks are particularly useful for recent trends since they furnish the statistics or facts to show cross sections in different years.

An *almanac* is a general yearbook, dependable for giving current significant facts and statistics on almost any topic of interest. A good one like *The World Almanac* (18) is almost invaluable for a schoolman. On many things it gives comparative figures for different years, to show trends.

Specialized yearbooks are highly valuable for their respective fields. Thus the *Statesman's Yearbook* (17) is the one for all problems of government. Annual proceedings are issued by many organizations, for example, the National Education Association. Biographical yearbooks, like the various *Who's Who* books, are usually issued annually or biennially and are useful for names, titles, and information on vocations, extent and quality of education attained by individuals, and the like. Some yearbooks give the general situation in a particular field, for example, the *Educational Yearbook* (15). Several educational yearbooks treat one topic of interest each year, an example being the *National Society for the Study of Education* (16). Others are collections of papers of interest to members, sometimes all being on one topic, and sometimes not. An example is the *Yearbook of the Department of Secondary School Principals of the National Education Association* (see Chapter XIV, Section III).

Annual reports are good for getting at the aims and accomplishments in a given year of the group concerned. By using reports for different years, trends can be discovered. Such a report may be that of an organization, of one official, of one geographical area, of one government level, of one educational institution, of one educational level, or of various combinations of these items. If each of any twenty educators representing all phases of education is asked to specify the educational yearbook of most value to him individually, the resulting list of yearbooks will number at least fifteen. In locating the proper yearbook for your purposes, the main thing is to figure out what agency or official would be likely to issue an annual report containing the material you seek.

Institutional catalogs are a kind of yearbook that serve as handbooks of information for students, faculty, and the public, particularly on courses offered. They give the aims and status of the

institutions for one year, sometimes including accomplishments. They often treat of past accomplishments over a long time. Catalogs for various years provide one with the facts to show trends. Such catalogs often contain brief statistical information for many phases on the whole institution and its large divisions. Some catalogs contain annual reports of various officials, but this is not the case with the larger institutions. They tend to give in their catalogs only summaries of the work of officials, having the latter issue separate annual reports. In studying an educational institution, one must guard against confusing the catalog with bulletins for special divisions. A bulletin for one division may not print anything contrary to the general pronouncements of the catalog for the whole institution. But such a bulletin will give many additional facts and illustrations. These often change entirely the interpretation of the particular item of interest.

At least one or more *limited-field reference books* are available for *every field of interest to educators*, and often for highly specialized fields. Fully half of Mudge's Guide to Reference Books and the Supplements (6-9) is devoted to descriptions of such specialized publications. The right one for any particular purpose can be located through the index.

IV. HOW TO SELECT REFERENCE BOOKS FOR USE ON AN EDUCATIONAL PROBLEM

The following procedures in the order here given, will produce the greatest results with the least expenditure of time and energy:

1. Get clearly in mind the precise purpose for which you need the reference book. You cannot intelligently choose reference books for an educational problem until you know precisely why you wish to use them. You may need a fact, an idea, a plan of organization, a bird's-eye view, or general information. Whatever you need, you must know clearly just what this is before it is worth while to lift your finger to hunt a reference book.

When you need to locate a *specific item of information*, consider it in relation to date, subject, place, and form. After you have studied this chapter and the references cited for further study, you will find that the suggestions given here will greatly assist you

in picking out the most likely reference book for what you seek.

2. Know what is in Section III preceding, and better still, the main points on reference books in Headley (5).

3. Decide the type of reference book needed for your particular purpose, using the check list of this section to aid you.

4. When you have decided the type, look in Headley or Mudge (6-9) to secure the name of the best reference book for your specific purpose.

5. When you know the author and name of this book, get its call number through the library card catalog or through a special file in the reference room. The library card catalog will list the book under its author's name in the alphabetical listing for the whole. The book will also be listed by author under some suitable topic. Occasionally, it may be listed by title. Usually, it is quickest to hunt by name of author. Any entry for it will give the call number, which can then be used to locate it on the shelves quickly. Some reference rooms, as at Teachers College, Columbia University, have a special card catalog giving their reference books with call numbers. A special catalog of this kind has a relatively small number of cards to look over, as compared with the huge numbers in the general library card catalog.

6. For securing at once the names of several available reference books on any topic, or the names of any given types of books, or the names of books listed according to authors, the reference room card catalog, mentioned in 5 preceding, is helpful.

This reference room card catalog will list the names only of books owned by the particular library and will therefore be far from complete. Moreover, it is likely to give only the bibliographical data found on Library of Congress cards, and these for only part of the entries. It probably will have nothing on the relative value of different reference books for the same purpose. This could not be otherwise, for there would be no human possibility of keeping up-to-date evaluations in a catalog of any sizable and growing collection. To bibliographies must be left the desirable feature of evaluation of material on one subject or related subjects. The reference card catalog will have its own special

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classifications. For instance, the one at Teachers College lists dictionaries under the joint heading of Encyclopedias and Dictionaries.

7. Be on the alert for reference books that are likely to be useful to you. You will thus add to your stock of effective library tools, and examining them, even casually, will help fix them in mind.

CHECK LIST SHOWING WHICH KIND OF REFERENCE BOOK IS NEEDED ON AN EDUCATIONAL PROBLEM

Item on Which Material Is Needed	Kind of Reference Book Likely to Contain Desired Material
Abbreviations	Dictionary or appropriate limited field reference books
Addresses	Directory or appropriate Who's Who. See also Chapter XXIV
Anniversaries and holidays	Special books for this purpose. See also Dates
Anonyms	Dictionary and special books for this purpose
Antonyms	Dictionary and special reference books for this purpose
Arbitrary signs	
Commonly used	Almanac
Extensive list	Dictionary, possibly in separate place
Highly specialized	Appropriate limited-field book
Biography	
Dead persons	Encyclopedia and limited-field books
Living persons	Appropriate Who's Who or similar book
Bird's-eye topical treatment	Encyclopedia or introduction to appropriate limited-field book
Christian names	Dictionary or special reference work
Colloquialisms	Dictionary or limited-field books
Correct usage of a word, phrase, or expression	Dictionary, also special books for this purpose
Countries	
Bare facts and statistics	Almanac or Statesman's Yearbook
Description	Encyclopedia
Location and the like	Atlas
Customs	Special reference books for this purpose
Dates	
Beginnings of things	Special reference books for this purpose
Birth and death dates of prominent persons	Encyclopedia and some dictionaries

Old	Encyclopedia or limited-field book
Recent	Almanac
Derivation of a word	Dictionary and special books for this purpose
Description	Encyclopedia
Diacritical marks, explanation of	Dictionary
Dialect	Dictionary or special books for this purpose
Etymology	Dictionary and special dictionaries and other books for this purpose
Events and progress of previous year	Almanac or yearbook
Explanation	Encyclopedia
Exposition	Encyclopedia
Facts	
Important, general list	Special books for
For use without meanings given	Almanac or appropriate yearbook
For use with meanings given	Encyclopedia
Foreign terms	Dictionary, possibly separate list, also appropriate limited-field books
Geographical names, spelling and pronunciation of	Dictionary or special reference work
Government of all countries	Almanac, Statesman's Yearbook
History	
Of persons	Same as Biography, above
Of things	
Brief	Encyclopedia
Extensive	Appropriate limited-field book
Of words	Same as Etymology, above
Idioms	Dictionary and special books for this purpose
Illustrations	Dictionary, encyclopedia, and appropriate limited-field books
Information	
General	Almanac and encyclopedia
Specialized	Appropriate limited-field books
Literary characters	Dictionary or special reference works
Meaning (permissible, preferable, possible)	
Of expressions	Dictionary and special books for this purpose
Of facts	Encyclopedia

40 GENERAL SOURCES AND TECHNIQUES

Item on Which Material Is Needed	Kind of Reference Book Likely to Contain Desired Material
Of phrases	Dictionary and special books for this purpose
Names, Proper	
Persons	
Dead	
Merely names and few dates	Dictionary, possibly special list
Biographical data	Encyclopedia and special books for this purpose
Living	
Merely names	Appropriate directory
Biographical data	Appropriate Who's Who type of book
Places	
Merely name and few data	Atlas, gazetteer, almanac
Same, with description	Encyclopedia
Obsolete words and terms	Dictionary and special books for this purpose
Organization of the field	Encyclopedia
Part of speech	Dictionary
Philology	
General	Dictionary
Specialized	Appropriate limited-field book
Phrases, all problems on	Dictionary, also special books for that purpose
Pictures	Special reference books
Plural form	Dictionary
Political boundaries or subdivisions	Atlas or gazetteer
Population	Almanac, yearbook, gazetteer, atlas, or census publication
Portraits	
Dead persons	Encyclopedia and special books for this purpose
Living persons	Appropriate Who's Who type of book; and educational periodicals located through Education Index. See Chapter XXIV of this book
Pronunciation	
Acceptable	Dictionary or encyclopedia
Correct, when authorities differ	Dictionary
Provincial words and phrases	Limited-field dictionaries

Pseudonyms	Dictionary and special books for this purpose
Quotations	Special reference works for this purpose See Chapter XXVI of this book
Scientific terms	
In general use	Dictionary
Specialized	Appropriate limited-field dictionary or general reference book
Slang	Dictionary and special slang dictionaries
Spelling	
Acceptable	Dictionary or encyclopedia
Correct, when authorities differ	Dictionary
Simplified	Appropriate dictionary
Statistics	
Current at time of printing	Encyclopedia
At present date	Almanac, yearbook, or special-field publications
Old	For these, and also for the other two classes, see Chapter XIX of this book
Status of anything	
Current at time of printing	Encyclopedia
At present date	Almanac, yearbook, or special-field publications
Street and highway maps	Atlas, or local and state guides
Synonyms	Dictionary; also special books on
Topical treatments	Encyclopedia
Trends of anything	
Former	Encyclopedia
Recent	Almanac and appropriate yearbooks
Words, all problems relating to	Dictionary; also special books for this purpose

V. HOW TO USE A REFERENCE BOOK

A reference book has no organized presentation of a unified topic. It is rather a miscellany of information. Such a book is never intended to be read through. It is constructed for a reader who comes to it with definite questions. It does not give him questions, but it will answer his.

The miscellaneous nature of the information given in reference books necessitates a definite and often somewhat involved and arbitrary plan of organization, indexing, and abbreviating. As

reference books differ markedly in their content and design, they cannot be organized on any uniform plan. Of course certain criteria of form and content exist for each type of reference book. To use any reference book quickly and accurately, you must first understand its type, and then its individual plan.

On the basis of the foregoing, there are four simple *rules for using a reference book* successfully:

1. Know definitely what questions you wish answered by the book.
2. Be sure you know the plan of the book so that you can quickly locate your information through its alphabetizing, table of contents, or index. The plan is always explained at the front of the book, which is also the place to look for a key to any abbreviations or arbitrary signs that you do not understand.
3. If unsuccessful in locating the desired information at the first attempt, do not give up. Try under another closely related heading. Try under another heading suggested by other elements in the situation, name of the place, for instance. Try another likely reference book or two.
4. If you have several questions to be answered by one reference book, get the answers to all of them before going to another. All reference books are used by so many readers that you have little chance of getting any one such book quickly.

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Significant *practice* in the use of reference books on educational problems, is afforded by Number 5 of the Alexander Library Exercises. If you do that exercise thoroughly, you will secure a knowledge and skill with reference books that will stand you in good stead throughout your professional life.

VI. REFERENCES FOR FURTHER READING OR ILLUSTRATION

For the *best general treatment* to give you a perspective, read carefully the chapter on General Reference Works, the first few pages of the first chapter on Reference Works for Limited Fields, and skim this and the remaining chapter in that section in:

Call
Number

5. Headley, Leal A. *Making the Most of Books*. Chicago: American Library Association, 1932. 342 p.

A thoroughly good treatment in popular style for college students of problems connected with the use of books in libraries, or by themselves. Well worth inclusion in any educator's professional collection of books.

For *specific details on individual books and their relative value*, Headley is good for the essentials. For complete information, the best reference is:

Call
Number

6. Mudge, Isadore G. *Guide to Reference Books*. Chicago: American Library Association, 1929. 370 p. (Fifth Edition. Sixth Edition scheduled for fall of 1935.)
7. Mudge, Isadore G., Reed, Doris M., and Wincheil, Constance M. *Reference Books of 1929*. An informal supplement to *Guide to Reference Books*, Fifth Edition. Chicago: American Library Association, 1930. 47 p.
8. Mudge, Isadore. *Reference Books of 1930*. An informal supplement to *Guide to Reference Books*, Fifth Edition. Chicago: American Library Association, 1931. 39 p.
9. Mudge, Isadore G. and Winchell, Constance M. *Reference Books of 1931-1933*. Third informal supplement to *Guide to Reference Books*, Fifth Edition. Chicago: American Library Association, 1934. 87 p.

The standard work in this country for all questions connected with reference books and for information about them. Includes many reference works for foreign countries.

For *suggestions on yearbooks* and the like of special interest to educators in connection with different topics, see:

Call
Number

10. Alexander, Carter. *Educational Research. Suggestions and Sources of Data with Specific Reference to Administration*. (Third Edition, Revised.) New York: Bureau of Publications, Teachers College, Columbia University, 1931. 115 p.
- A bibliography of bibliographies and notes on sources, particularly strong on administrative aspects, very useful for references up to 1931.

44 GENERAL SOURCES AND TECHNIQUES

For *instructions in the use* of various types of reference works, read one of the following:

Call
Number

11. Brown, Zaidee. *The Library Key*. New York: H. W. Wilson Company, 1928. 84 p.
12. Fay, Lucy Ella, and Eaton, Anne. *Instruction in the Use of Books and Libraries*. (Third Edition, Revised.) Boston: F. W. Faxon Company, 1928. 475 p.
13. Moody, Katherine T. (Comp.) *The Library Within the Walls*. New York: H. W. Wilson Company, 1929. 514 p.
14. Ward, Gilbert O. *The Practical Use of Books and Libraries*. (Fifth Edition, Revised.) Boston: F. W. Faxon Company, 1933. 195 p.

Other *references noted for illustration* in this chapter are the following:

Call
Number

15. *Educational Yearbook*. I. L. Kandel, Editor. 1924—. International Institute of Teachers College, Columbia University. New York: Bureau of Publications, Teachers College, Columbia University.

The early volumes described educational systems in the greater part of the world. Recent ones have discussed major problems occupying the attention of educators everywhere, the 1933 volume, for example, being on missions and mission schools.

16. National Society for the Study of Education. *Yearbook*. 1902—. Bloomington, Ill.: Public School Publishing Company.

These form probably the best collection within their period of materials showing current educational thought and advanced practice in all important fields.

The publishers in 1926 issued a pamphlet, *Commemorating a Quarter of a Century of Service of the National Society for the Study of Education*, which indexes by author, subject, and year, numbers 1 to 25 of the yearbooks. For titles of yearbooks since 1926, see the last pages of any recent number.

Call
Number

17. Statesman's Yearbook. 1864—. New York and London: The Macmillan Company.

Highly valuable for brief descriptions, facts, and statistics for all countries on all phases of government, including education.

18. The World Almanac. 1868—. New York: World-Telegram.

An extremely useful, comprehensive, and accessible collection of miscellaneous information, facts, and statistics. Now issued in paper, \$.50, and cloth, \$1.00.

CHAPTER VI

KEEPING A PERSPECTIVE

THE library searcher often at the start believes there is little or no literature available on his problem. Usually this belief is due to his not knowing the right headings under which to look (Chapter IV) or the proper indexes to use (Chapters X and XI). In most instances great numbers of references threaten to overwhelm him. He therefore needs to know how to preserve a perspective at all costs, and to select a reasonable number of good items. Such knowledge will decrease mental strain and raise the quality of work done.

The best procedures for attaining and keeping the desired perspective are given below. While not mutually exclusive, they are in general most profitably carried on in the sequence given.

I. MAKE A WORKING OUTLINE OF THE PROJECT

To retain the mastery over your library materials for solving a problem, first decide just what references, and how many of them, you need. Only after such questions have been answered, does it pay to consider where the desired items are likely to be found. You can make such decisions profitably only *in their proper setting* as part of the plan for the whole project.

The best way to keep clearly in mind the precise purposes for which you wish references, is to *outline your project*, using some such list of questions as the following, and jotting down tentative answers for them:

1. What is the exact title of my problem or topic?
2. What are the best statements I can now make of my problem with its sub-problems, or of my topic with its sub-topics?
3. Just what do I need to do to solve my problem or to secure the information on my topic, as given in 2?
4. What specific library materials do I need to carry out 3? (See Section II.)

5. Just how do I propose to carry out 3 with the help of the materials of 4?
6. What difference would it make whether or not I solved the problem or adequately worked up the topic?

The answers to the foregoing questions will constitute a tentative working outline for the project. If you construct the outline in loose-leaf form, each main question starting at the top of a new sheet, changes and modifications will be easy. By shifting the sheets on a table, you can see your whole outline at once, and thus find it easier to keep a perspective.

II. LIST THE SPECIFIC LIBRARY MATERIALS NEEDED

In considering what specific materials are needed, questions like those below are helpful. With nearly every item should be understood the additional question whether old, fairly recent, or up-to-date references are desired.

1. Do I need over-view treatments?
 - a. Merely one brief encyclopedia type of article?
 - b. Merely one extensive treatment as in a book or monograph?
 - c. A bibliography? Short? Extensive?
2. Do I need an exhaustive bibliography?
3. What kinds of content material do I need?

<ol style="list-style-type: none"> a. Biographical data? <ol style="list-style-type: none"> (1) Dead persons? (2) Living persons? b. Book reviews? c. Criticisms? d. Current practice descriptions? e. Dates? f. Definitions? g. Editorial comment? h. Facts? 	<ol style="list-style-type: none"> i. History of the matter? j. Illustrations? k. Names, lists of? l. Portraits? m. Researches? <ol style="list-style-type: none"> (1) Abstracts or summaries of? (2) Individual researches themselves? n. Statistics?
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III. LIST THE *LIKELY* SOURCES

By this time the working outline should have been made up and the foregoing questions on library materials answered. As a searcher, you are now ready to jot down for each item the sources you think you should consult. You can do this success-

fully only after you have pretty well covered the equivalent of this text and exercises. But in the corresponding exercise for this section, Number 6, you can jot down the sources you happen to know at the time. Even guesses will be better than no planning at all. The discussion of Scouting in Chapter VIII, Section III, 1, will be very helpful in this connection.

IV. LIST HEADINGS UNDER WHICH TO LOOK

Before going to likely sources for references, make out this list, the elaborateness of which will vary with the project's extent. On a simple problem it may be only a list carried in the head. On a more extensive project, it needs to be a list like that in Exercise 4.

V. FIND AND COLLECT *LIKELY* REFERENCES

The next step is to look up promising references under their *likely headings* in the sources, getting only the minimum number of references for the desired end. If only a brief history of secondary education is desired, use a single citation to the first four chapters in Briggs's *Secondary Education* (19) and proceed immediately to hunt references on your other phases. If one full treatment of the history of secondary education is likely to serve your purpose, use Kandel's *History of Secondary Education* (20) in the same way. You could conjecture that each of these single references would have attached to it a bibliography, which happens in fact to be the case.

When you have in mind the items on which you need materials and the kinds of information needed, it is easy to retain or cast out references at once, using their titles only. In any event, *take the most likely references* for a given purpose. For example, a very recent bibliography is preferable since it is apt to cite earlier lists.

Duplication may be partially avoided by skimming the possible references before copying any of them. If you have all your sources before you, skim them all for possible entries on one phase of your problem before copying any references for that phase. If you have before you only one source, say the Education

Index (51), go through it for all promising references on one phase before copying any of them. On the whole, however, it is best not to spend much energy trying to cast out duplicates, for that at this stage requires more time and effort than the results warrant. You will save energy if you take all likely references as you find them, trusting that duplicates will be shown by your filing.

Before attempting to take down many references, lay out a *correct mechanical procedure*. This is fully discussed in Chapter VII. For purposes of keeping your perspective, it is sufficient here to point out that in copying references you have two possible safe procedures. First, you may take entries exactly as you find them, either by copying, or by clipping if they come from an inexpensive government document which you own. If you clip, two copies of the document will enable you to clip from both sides of the pages. Second, you may employ a uniform bibliography card which forces you to put down all available data on a reference in such form that missing items will instantly be noted when you write the reference in your final copy. The Alexander Universal Library Card, used in Exercise 7, is for this purpose and is explained in Chapter VII. Do not confuse the final form of your references with that for this step. Putting references in shape for publication requires such care on details that if the procedure is used at this stage, keeping any perspective will be almost impossible.

VI. KEEP REFERENCES FILED AS ACCUMULATED, UNDER HEADINGS OF WORKING OUTLINE

It is highly advisable to file references taken down, about as fast as they accumulate, under the headings of your working outline. If you do this regularly, you not only will keep your perspective, but you can at any time tell almost instantly the sub-problems or sub-topics on which you lack materials and on which you need to concentrate. Note that the outline here mentioned is not the one for your final treatment. You cannot safely make out the latter outline until you know what you are going to write up and the points you intend to establish.

Some writers on bibliographic methods advocate filing references in one long alphabetical list for easy casting out of duplicates. This takes care of duplication very nicely, but it is a marked deterrent to keeping a perspective of the whole. In this writer's judgment, perspective is far more important than avoiding duplication. He therefore advocates filing references under the headings of the working outline, trusting that the alphabetical arrangement by authors under a given heading will show up duplications. He is willing to pay the price of some duplication for the far greater good of keeping a perspective.

VII. READ LITTLE WHILE COLLECTING REFERENCES

The questions of how much reading and what kinds of reading to do while gathering references are always difficult for beginners, and require caution even for experienced library searchers. Unless you watch carefully, you will, at the end of the time set aside for securing references, wind up with a lot of valueless items, or with adequate materials for only one or two parts of your plan. These parts, moreover, may be the most inconsequential in your whole purpose.

Such difficulties are most easily avoided by the following procedures in the order given:

1. Read only titles and brief annotations until the working outline has been covered as well as can be done from these two.
2. Fill up gaps in references for your working outline headings thus:
 - a. Skim the titles you already have to see which references are likeliest to contain treatments about your gap headings.
 - b. Skim the corresponding likely books or articles, noting, as separate references for your gaps, any good numbers of pages, chapters, or chapter or sectional bibliographies.
 - c. Try to fill up still existing gaps in important places, by a further search in sources for specialized materials.
3. Skim all documents about which you feel the slightest doubt as to pertinency. But skim only to see if the references are worth keeping.

For further discussion of reading and note-taking, see Chap-

ters VIII and IX, with the corresponding exercises, Numbers 8 and 9. It is sufficient here to point out that for keeping one's perspective, reading should proceed from a bird's-eye view or an over-view to the detailed treatments. This holds for the problem as a whole when you first begin reading on it. It holds as well for intensive work on any phase of your problem, when you reach that stage.

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For *practice* in keeping a perspective in library work on a problem or topic, use Number 6 of the Alexander Library Exercises. The pattern of procedure in that exercise, if followed in your future library activities, will enable you to keep your balance and preserve a great peace of mind. The exercise covers making a working outline, listing the specific library materials needed, jotting down the probable sources for these materials, and testing your predictions.

VIII. REFERENCES FOR ILLUSTRATION

The significance of these references for this chapter was pointed out in the first paragraph of Section V:

Call

Number

19. Briggs, Thomas H. Secondary Education, pp. 1-75. New York: The Macmillan Company, 1933.
20. Kandel, I. L. History of Secondary Education. Boston: Houghton Mifflin Company, 1930. 577 p.

CHAPTER VII

THE MECHANICAL WORK ON A BIBLIOGRAPHY

I. PLANNING

MAKING a good bibliography inevitably entails considerable mechanical work. Drudgery here, however, is justifiable only when necessary to produce a satisfactory result on time. To subordinate this routine properly, separate mechanics from thought wherever possible.

A good example to follow is to select all the references you wish to take from an existing bibliography for use on one of your sub-topics before you copy a single entry. The selection involves accurate thought; the copying is almost wholly mechanical. If you mix the two by selecting a reference, copying it, selecting another and then copying it, your selection may easily become as mechanical as your copying. To separate the two, first complete your selections for this particular unit, and then do all your copying on that section. If you have to sacrifice anything, let it be the mechanics. In cutting the routine labor, however, you must use intelligence or you will later have to do much of the work over again. A typical instance of needless repetition is going back for call numbers or similar items which should have been noted when you first copied a reference.

II. CLEAN-CUT, DEFINITE AIM OR AIMS, AS CLEARLY REALIZED

Bibliographies for varying purposes require correspondingly different procedures. If the aim is simply a *working bibliography* for your own use, you will need to include likely references on the problem or topic you are studying or wish to study, particularly references which will enable you to check up or verify your

conclusions. Such a bibliography must be closely related to your outlining, that is, to your thought-patterns regarding your problem. For a more complete discussion of this point, see Section V, following, on Classification, and Chapter VI, Section I.

If the aim is a *bibliography primarily for others*, you should rigidly select only references to statements or evidence which will enable the reader to check your statements. This means exact citations, say Chapter II, or pages 62-65, not the whole reference.

Should your aim be to give a *selected bibliography*, such as is found in an encyclopedia or at chapter ends in textbooks, pick out references with an eye to their value to the reader.

Another aim of a bibliography intended for others may be to give them an *exhaustive list* of valuable references about a problem or topic, such as is usually found in connection with researches and highly specialized treatments, or even in separate publications containing only references.

The aim may be a *combination bibliography*, intended at one time for the author's use, and later for others. The references will of course be largely the same for the two purposes, but the arrangement and forms of write-up will be markedly different. The last two items will be so different, in fact, that trying to collect references in a form for final write-up entails such constant care and meticulous work as to prevent any real thought on one's problem. To save any time and energy for thought, collect the original references solely with the idea of getting them quickly, accurately, and as fully as your sources permit. Many of these original references will not be used in the last write-up, so that rearranging them in final form is a sheer waste of energy until you know which you will retain.

To give another person a pint of good references in a bushel of chaff renders him little aid. Rather, such a procedure is an annoyance which makes him despise the maker of the bibliography for lack of intelligence, industry, and consideration for readers. To be of any material help to others, any *bibliography* except the first kind must clearly show the relative value of references. Any bibliography, of course, saves time for others on

the mechanics of finding the titles themselves—often a lot of time.

To show relative values in references, several methods may be used. The bibliography may be selected in the first place, and so stated. The most important references may be starred or accompanied by symbols indicating any one of four or five degrees of value. The whole may be classified by topic or thought units, so that the references on the most important topics may be easily picked out. Any classification on a mechanical basis only, for example, by books, pamphlets, periodical articles, and the like, is worthless for showing relative values. Annotations frequently comparing their respective references with other references in the same classification, form about the best way of showing relative values in references, and may be combined with one of the other ways.

III. FULL BIBLIOGRAPHIC DATA ON EACH REFERENCE

Full data are necessary in order that any reader can locate the reference surely and easily in a library, send to a library to borrow it, or purchase it himself, as the case may require.

Specifically, the following items should be included unless clearly not needed:

1. *Author's name*. Surname, first name in full, and middle initial, with care to get spelling correct. This item is needed because all catalogs and indexes have author entries and this name will probably be used for determining the place of the reference in the bibliography itself. If there is joint authorship, the names are treated in the same way, the first one given being used first.
2. *Title of book or article*. This item is needed to be sure of getting the proper writing by the author. He probably has written many articles and often several books.
3. For a *book*, these additional items:
 - a. *Date of publication*, or *copyright date* (denoted by "c"), and *edition*. Needed to show recency of the treatment.
 - b. *Name of publisher*. Not always given, but necessary whenever the user of the bibliography is likely to wish to purchase some of the books listed.
 - c. *Place of publication*. Needed when names of smaller or unknown publishers are given. Not necessary for the larger publishers.

d. If in a *series*, as in the case of bulletins, some dissertations, and the like, *volume and number*. Needed for easy identification and for purchasing.

e. *Page numbers* are given to show the length, since the user of a bibliography, other things equal, will take the shortest of several references for the same purpose.

Pages for the book proper are denoted by Arabic numerals and those for introductory matter by Roman numerals. Thus "xix+345" means the book has nineteen pages in the preface, foreword, table of contents, and the like, and 345 pages in the book proper.

f. *Price* needs to be given only when readers are likely to wish to purchase many items.

4. For a *periodical article*, these additional items:

a. *Name of periodical*.

b. *Volume and pages*.

c. Often advisable to add also *month* (week for a weekly and full date for a bi-monthly) and *year*. These items needed for use in libraries that do not bind their periodicals, and for one wishing to purchase a given periodical article.

d. Data on *publishers* and *prices* are unnecessary because the former are easily obtained from several sources, such as the United States Office of Education annual directory or the Education Index (51), and prices from any number of the periodical.

In securing full bibliographic data, serious difficulties arise unless special precautions are taken. References will come from all sorts of sources, items within the references being arranged in various orders. Often many references will be very incomplete. If one copies all references just as found, he cannot tell quickly which are defective. Also, it is hard to use references arranged in various forms.

The Witmer and Feagley article (28) gives forms for getting references into uniform shape on blank 3×5 cards so as to make up a working bibliography. The cards are very convenient in size for carrying around, they and the filing equipment necessary cost little, and there is room for writing. In the writer's experience, however, the use of blank cards in this way requires carrying the correct forms in one's head to such an extent as to cause considerable strain, which engenders fatigue and a resulting tendency to omit items. Accordingly, he has devised the Alexander Universal Bibliography Card (21).

1. Author		Last name	First name	Middle initial
Above for call nos.				
2. Title of whole				
3. Title of part if only part used				
4. Title of series if any				
5. Publisher		City	State	
(omit for periodical. Instead give name of periodical below.)				
		Book	Periodical Reference	Bulletin or Yearbook
				School Report or Survey
6. Volume number				
7. Document number				
8. Pages (total for whole, first and last for part)				
9. Year of publication or copyright, the latter preceded by the letter "c"				
10. Month				
11. Date for daily or weekly				
ALEXANDER UNIVERSAL BIBLIOGRAPHY CARD. First edition.				
Copyright, 1934, by Teachers College, Columbia University.				

Fill out or definitely reject every item in upper half and in the ONE pertinent column in lower half.

I. EXACT SCOPE OF FIELD AND GROUND COVERED

II. SIGNIFICANT PROBLEMS RAISED

III. SIGNIFICANT CONCLUSIONS REACHED

IV. UNIQUE CONTRIBUTIONS

ANNOTATION:

V. SOURCES OF DATA (Check)

- _____ Literature of the field
- _____ Official statistics published
- _____ Official statistics unpublished
- _____ Personally collected statistics
- _____ Personal observation
- _____ Interviews _____ Public Documents
- _____ Questionnaire

VI. METHODS OF TREATMENT (Check)

- _____ Statistical _____ Experimental
- _____ Comparative _____ Analytical
- _____ Descriptive _____ Historical
- _____ Philosophical _____ Legal

VII. MANNER OF TREATMENT (Check)

- _____ General _____ Specific
- _____ Intensive _____ Exhaustive
- _____ Technical _____ Nontechnical

VIII. DATES COVERED BY DATA

REVERSE OF CARD

The front side of this card shown on page 56 has blanks for all needed items on any reference, so arranged as to show immediately when necessary data are lacking. The upper half of the card has items common to all references. The lower half has items needed by the four most important kinds of references used in educational work. Use of the card calls bibliographic items to mind automatically and forces one to fill all necessary blanks or note that they lack data. All blanks do not need to be filled in at first if they are not in the reference as originally found, but when the final bibliography is being made up, the cards retained can be quickly and accurately completed. The maker of the bibliography can easily pull out cards of one class by selecting cards which in the lower half have entries only in the column for that class, e.g., books. Before pulling out any card this way, he should write the filing heading at the top of the card so that it may later be easily returned to its proper place in the bibliography.

The back side of the card is for making notes from which to write an annotation. The upper part requires specific listing or checking, to provide the evidence for the annotation. As both annotation and evidence can be easily seen at once, it is easy to check the annotation.

Assistants on working up a bibliography can easily use this card in getting reference data, in preliminary reading, and in annotating.

The card's size is considered a disadvantage by some workers, but is an advantage for use with a typewriter. It does not seem possible to secure the desired relief from the strain of carrying items in one's head and have plenty of space for writing, on a smaller card. In the writer's judgment, it is better to copy fewer references at the start by making a better selection, and to get full and accurate data on the worth-while ones.

IV. COMPLETE FLEXIBILITY

To make a good bibliography, the references must be in such physical form that they can be easily shifted for purposes of classification. It is almost impossible to use references from many

sources on the same phase of a problem or topic, unless all the pertinent references can be brought together at the time one needs to work with them. The only way to attain complete flexibility here is to use some loose-leaf system that mechanically puts each reference on its own card or sheet.

V. CLASSIFICATION PERMITTING EASY LOCATION OF
A GIVEN REFERENCE AND ALSO EASY GRASP
OF THE WHOLE BIBLIOGRAPHY

A bibliography is of little use to the worker or reader unless he can quickly locate a given reference. He also needs frequently to look at the bibliography as a whole, a necessary thing for any perspective. These two requirements can be met only by adequate classification within the bibliography. They are not attainable so long as the references remain in the rat's-nest or junk-heap form.

Classification varies according to the type of bibliography. A very short bibliography may have its references organized according to authors' names in simple alphabetical order. With so few references, a reader can quickly locate any one, and by glancing over them keep the run of the whole without much effort. A longer bibliography may be classified by topics with the references under each topic alphabetized by authors. For advancing thought or grasp of an educational problem, mechanical classification of references by kind of publication, such as books, pamphlets, periodical articles, or government documents, is worthless. True, historical writers do use such mechanical organization, but only within the two thought divisions of primary and secondary sources. For historians, difficulties connected with securing and handling so many items in so many different sorts of publications make this plan advisable for their particular kind of bibliography.

The classification may vary according to the stage of the work and the purpose of the bibliography. There may be no classification at the start, simply an alphabetical order by authors, as recommended by some writers. But the worker will early find a need for organizing his references by problems or topics. As soon as he starts to read seriously, this functional organization of ref-

erences to follow the outline discussed in Chapter VI, Section I, is imperative. The final bibliography may be arranged to correspond with the chapters of the write-up, the parts being either assembled at the end or appended to their respective chapters.

Still another organization puts the whole bibliography at the end of the treatment, organized by problems or topics.

VI. UNIFORM SYSTEM OF ENTRIES

Uniformity of entries in the *working bibliography* has been fully discussed in Section III preceding.

The *final bibliography*, especially if it is to be published, should have a uniform system of entries. Many such systems have been recommended and employed by various writers and agencies. The best policy is to choose some one good system and stick to it. Style manuals are published by the United States Government Printer, the Bureau of Publications, Teachers College, Columbia University, the University of Chicago Press, and large publishing houses like The Macmillan Company. If you know where you will publish, get the stylebook of the company and follow the forms given.

Some years ago, in view of many requests for such forms, the writer got up the forms given in Section VII. They were made up to fit different types of references and conform in general to the requirements of the University of Chicago Press, the National Education Association, and somewhat less to those of the United States Office of Education. They have been pronounced very helpful by many educational writers and students. In the event that you do not know your publisher, these forms will be safe ones to use. They give data fully and can easily be changed by any editor to correspond with his particular forms. The Witmer and Feagley reference (28) also has a consistent set of forms for various kinds of entries.

With the reference forms in this book, the author's experience has been typical. As, at the time of preparing the manuscript, he did not know where he would publish, he used throughout the forms of Section VII following. The editor for the publisher, however, thought it best not to italicize titles of books and names

of periodicals in this particular book. Consequently, she took out all such italics in the manuscript reference entries. Since the editor has secured uniformity according to her system for references, the author is satisfied.

VII. TYPICAL ENTRY FORMS FOR A PUBLISHED BIBLIOGRAPHY

1. BOOK

(A) *Whole Cited*

Percival, W. P. *Why Educate?* (Second Edition.) Toronto: J. M. Dent and Sons, 1935. 175 p.

(B) *Part Cited, With Title of Part Given*

Morrison, Henry C. "Determination of Salary and Load." *The Management of the School Money*, p. 260-92. Chicago, Ill.: University of Chicago Press, 1932.

(C) *Part Cited, Without Title of Part*

Judd, Charles Hubbard. *Genetic Psychology for Teachers*, p. 265-96. New York: D. Appleton and Company, 1903.

Burton, William H., editor. *The Supervision of Elementary Subjects*, p. 110-30. New York: D. Appleton and Company, 1929.

2. BULLETIN OR YEARBOOK

(A) *Whole Cited, Author Named*

Alter, Donald R. and Others. *Instructional Activities in the University High School*. University of Illinois Bulletin, Vol. 24, Educational Research Circular, No. 47. Urbana, Ill., 1926. 28 p.

(B) *Whole Cited, Without Naming Author*

National Society of College Teachers of Education. *Studies in Education*. Fifteenth Yearbook. Chicago, Ill.: University of Chicago Press, 1927. 206 p.

(C) *Part Cited, Naming Both Author of Part and His Committee*

National Society for the Study of Education. *Second Report of the Committee on Minimum Essentials in Elementary School Subjects*. Sixteenth Yearbook, Part I, p. 128-42. Wilson, G. M. "Survey of the Social and Business Use of Arithmetic." Bloomington, Ill.: Public School Publishing Company, 1917.

3. PERIODICAL REFERENCE

(A) *Author Known*

Anderson, C. J. "The Use of the Woody Scale for Diagnostic Purposes." *Elementary School Journal*, 18:770-81, June, 1918.

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(B) *Author Not Named, or Unknown*

"Blessed Is He Who Has Found His Work." *Wisconsin Journal of Education*, 63:182-83, December, 1930.

4. SURVEY OR REPORT, CITING NAME OF CITY OR STATE AS THE LOCATING HEAD

Tampa, Florida. *Report of the Survey of the Schools of Tampa, Florida*. Institute of Educational Research, Division of Field Studies, Teachers College, Columbia University, G. D. Strayer, Director. New York: Bureau of Publications, Teachers College, Columbia University, 1928. 308 p.

5. THESES AND DISSERTATIONS

(A) *Published* (These are apt to be in a series)

Elliott, Charles Herbert. *Variation in the Achievement of Pupils*. Contributions to Education, No. 72. New York: Bureau of Publications, Teachers College, Columbia University, 1914. 114 p.

(B) *Unpublished*

Staker, Moses Roy. *A Study of the Mistakes in the Fundamental Operations in Arithmetic*. Unpublished Master's Thesis, Department of Education, University of Chicago, 1917. 71 p.

VIII. ANNOTATIONS

The place of annotations in the *working bibliography* was touched upon in the second paragraph from the end of Section III preceding. If the Alexander Universal Bibliography Card is used, annotations do not need to be written up for the worker's purposes as the data on the upper part of the back of the card will be sufficient for him. Usually, an annotation should be written up for practically every reference in the final *bibliography for publication*.

In annotating references, *start* by keeping in mind the specific purposes of the particular bibliography and of the individual entries. If several entries appear under one heading, then the annotation for the best entry in the division should clearly show why it is best. If the reference listed is on a given phase of the main problem, the corresponding annotation should show just what the entry contributes to that aspect.

The *purpose of any annotation* is to give the reader a bull's-eye hit of the chief features of the reference. Accordingly, the annotation should be brief, but not too brief. After the main ideas are

clearly in mind, the annotator may achieve brevity by a little care for language. The main ideas may be put into verbs of action used to start the annotations. Or verbs may be omitted in some notes. The use of passive verbs, impersonal constructions, and needless repetitions of "this study," "this book," and similar items easily inferred, make for much longer annotations and consequent expense, with no proportionate benefit to the reader.

Active verbs at the beginning of references can show all sorts of shades of meaning. The following list is taken from a few pages chosen at random in Alexander and Covert (22):

Analyzes, appeals for, argues, attempts, calls attention to, cites, compares, considers, contains, criticizes, deals with, defines, describes, details, devises, discusses, emphasizes, estimates, explains, examines, gives, includes, indicates, involves, lists, outlines, points out, portrays, presents, recommends, redefines, reviews, seeks, sets up, shows, states, studies, suggests, summarizes, tabulates, traces.

Examples of extremely brief annotations using the active verb form will be found in the bibliography at the end of Reeder (26). Excellent ones for thought, but with unnecessary words, occur in Whitney (27). For longer ones with more specific items and descriptions, but with active-verb brevity of expression, see Alexander and Covert (22).

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For *practice* that will give you highly valuable experience in getting full bibliographic data on different types of entries, and on annotating, use Number 7 of the Alexander Library Exercises.

IX. REFERENCES CONTAINING ACCEPTABLE BIBLIOGRAPHIC FORMS

The values of the unannotated references have been pointed out in the text.

Call
Number

21. Alexander, Carter. Alexander Universal Bibliography Card. New York: Bureau of Publications, Teachers College, Columbia University, 1934.

In packages of 100 only, 60c per package prepaid. For reductions on larger quantities write the publishers.

Call
Number

22. Alexander, Carter and Covert, Timon. Bibliography on Educational Finance 1923-1931. U. S. Office of Education Bulletin, 1932, No. 15. Washington: The Government Printing Office, 1932. 343 p.
23. Almack, John C. Research and Thesis Writing, p. 242. Boston: Houghton Mifflin Company, 1930.
Example of form for newspaper citation on page cited.
24. Good, Carter V. How to Do Research in Education, p. 206. Baltimore: Warwick and York, 1928.
Forms for citing unpublished material and legal material on page cited.
25. Monroe, Walter S. and Engelhart, Max D. The Techniques of Educational Research, p. 74-76. University of Illinois Bulletin, Vol. 25, Educational Research Bulletin, No. 38. Urbana, Illinois, 1928.
Examples of acceptable bibliographic forms.
26. Reeder, Ward G. How to Write a Thesis (rev. ed), p. 201-16. Bloomington, Ill.: Public School Publishing Company, 1930.
27. Whitney, Frederick L. Methods in Educational Research, p. 136-40. New York: D. Appleton and Company, 1931.
28. Witmer, Eleanor M. and Feagley, Ethel M. A Beginner's Guide to Bibliography with Examples Drawn from the Field of Education. (Second edition, revised, 1935.) On sale in the Reference Room, Teachers College Library, Columbia University, 50c.

CHAPTER VIII

LIBRARY READING

Most people using educational libraries already can read separate passages and references thoroughly enough for their purposes, or have access to plenty of good directions for such work. Their reading difficulties occur chiefly in attaining an adequate over-view of their intensive work with many references. As no satisfactory treatment of these difficulties has been located elsewhere, this chapter stresses the type of reading which the present writer calls "scouting," from the similar activity in exploration.

I. KINDS OF READING NEEDED AND WHEN TO USE THEM

1. In making a bibliography, *fast scouting* is early required to insure sufficient pertinent references at the time these count the most. You need at the start to do three things quickly: To locate likely references, to classify them from their titles, and to chuck them into their proper places in your working bibliography.

2. *Finding specific materials within a given reference* is a form of scouting so important as to merit separate mention. It is necessary as soon as you need to use seriously a publication of any length. By knowing where and how to look for the main ideas, statistics, graphs, bibliographies, and the like, within a given book, you can greatly cut down the time necessary for extracting all you need from it.

3. *Skimming* is needed once you have located the likely places for your desired materials within a given reference. The term means precisely what the figure of speech implies, taking off the cream of the ideas, evidence, facts, information, illustrations, statistics, or whatever you require. Skimming is the first step in all serious reading, even in re-reading if the purpose has changed. Without intelligent skimming, you can never attain comfortably

an effective perspective of your library work on your problem or topic.

4. *Thoughtful or critical reading and re-reading* is the final stage of any serious work with a reference or a part of it. You need to do such reading on the parts shown by skimming to be valuable for your particular purpose. You must do such reading if you are to secure the actual ideas, information, facts, and evidence you need. You must painstakingly read and re-read such passages if you are to grasp their real meaning and relative worth. You can attain neither unless you know their context, which requires very careful reading after intelligent skimming.

II. SUGGESTIONS APPLICABLE TO ALL TYPES OF READING

I. *Read only when you have a definite and clear purpose.*

Pitkin states this caution very emphatically in such sentences as these:

Read Only What Bears Vitality on Your Most Pressing Tasks from Hour to Hour. Avoid Miscellaneous and Random Reading (32 : 59).

Whenever you dawdle over printed words which neither enlighten nor amuse you, you are partly committing suicide (32 : 15).

With the general admonition to have a definite purpose in reading, most educators will readily agree. They may not, however, understand the real purposes of some commonly advocated study procedures such as browsing and taking notes, or the implications of these purposes for reading. Accordingly, the important procedures and implications will now be discussed.

Whatever else you may plan to do in your reading, your *first purpose* always should be to get at the *exact intended meaning of the writer*. You read only with what you bring to the reading, with your whole mind-set and total past experience. You need to be on your guard against misinterpreting the writer. This means you must be sure how he uses words. He may not use them according to dictionary or current meanings. It means also that you should not take a passage out of its context and so give it a wholly erroneous meaning, one never intended by the writer. This latter caution is especially needed in dealing with strong

statements which a writer is likely to modify or guard in his next sentence or paragraph.

As a purpose for serious reading in education and educational research, *browsing* is *generally useless*. This is intended in no way to discount its high value as a purpose when you read for general information, culture, and relaxation. You are no more apt to hit the material you need for work on an educational problem by browsing, than you are to run across a particular friend in the business section of New York City. If you wish good references on a topic, look where they are most likely to be found.

Reading for the purpose of making *abstracts* is *often unwise* except in producing extensive summaries or elaborately annotated bibliographies. If you can see a document only once, making an abstract of it may be the only feasible procedure. However, you will find the abstract of little use to you later unless you have taken pains to jot down everything you think you will ever need from it. This is extremely difficult at the outset. If the publication can possibly be secured several times or kept long enough, skimming and re-skimming, once for each specific purpose, will pay you a good dividend on each occasion. Reading the document only once and then abstracting it is likely to pay no dividend whatever. When you later use your abstract, the chances are that you will find that what you need then is something that did not seem at all important when you made the abstract.

In reading for note-taking, your purpose should be: *Take notes only when you have a definite need for them which you can justify, and when you know what notes to take.* This is fully discussed in Chapter IX. Here the most important point is not to take any notes on a book or chapter until you have skimmed it to see which parts are worth reproducing in your notes. Try this on some reference on which you need to take notes. You will often find an idea better stated or a fact better proved in later parts of the reference than when the writer first brought it up.

2. *Before starting to read a whole book, make a preliminary study of it for pertinency to your purpose.*

For any book that you think you will have to read on your

problem, ten minutes spent on a study of this kind can be expected to pay big dividends. A good way to make such a study is as follows, keeping your purpose in mind throughout: Examine the title page to note the reputation of the author and consider the prestige of the publisher. Next look at the date of copyright to gain some idea of the recency of treatment. Read the preface to determine the purpose, scope, and distinctive features of the book. Glance through the table of contents to note the sections applying to your problem, and the other sections possibly pertinent. Scan the index to see if it cites other authorities on your problem and if it lists phases of your problem with additional page entries beyond those you have already located in the table of contents.

3. *Read for over-view first, and for details later.*

This applies to a whole book or to a part of it bearing on a specific sub-problem of yours and is the justification for skimming. It is the proper procedure for each skimming with a different purpose. As Pitkin says (32:13), "You will never become a skillful reader unless you first cultivate a fairly keen sense of the *relative importance of things*." In addition to going to your reading with a purpose, this means always trying to consider the article or section as a whole and to keep the relations of its parts.

This suggestion also means starting with an article covering the entire field or section you are working on, and then going to more detailed treatments of it as a whole, or of its sections. You can profitably start work on almost every problem with an encyclopedia article or the introduction or conclusion of a book covering the problem. Through this procedure you keep a sense of relationships not otherwise possible, and attain a good perspective. See also Chapter VI, Section VII.

In going from the whole to details in your reading, *proper use of the dictionary* is increasingly advisable. Your understanding of what you read will clear up in proportion as you attach more and more precise meanings to the words involved. The dictionary gives you such meanings. However, constantly run-

ning to it to look up words will seriously interfere with your flow of thought and your grasp of the meaning of the whole. The best procedure here is to get meanings of words from their contexts and to resort to the dictionary only for words that you cannot satisfactorily understand from their contexts. The need of the dictionary increases as you proceed from scouting through skimming to critical reading.

4. *Save your memory efforts for the higher levels of your work.*

Such use of memory is necessary if any real thinking is to take place in library reading. This suggestion has special values for bibliographies and note-taking. It means that you should organize and systematize your bibliography so you will not have to burden your memory with references. It means also that you should keep your notes on a subject filed together so that you can easily run over them. This spares you the strain of remembering them with effort and frees energy to think of relationships and of what to do with the facts and the data. The latter are essential for assimilating further reading and for deciding what more needs to be read. See Chapter III.

5. *Increase your speed in reading as much as possible without loss of results and undue strain.*

Because you will have so much reading to do, any gain in speed without loss of quality of reading is decidedly advantageous. For ways of increasing speed, two popular brief lists of suggestions are given. An interesting treatment of the whole matter of increasing reading speed occurs in Pitkin (32). Merely reading that reference will not do much, but going through its exercises will produce satisfactory results shortly.

a. Watson-Newcomb Rules

- (1) It is possible for most students to improve in reading even though they have attained a relatively high degree of excellence.
- (2) Speed can be increased if useless motions are eliminated. Lip movement, whispering, pointing, and head movements slow up reading and are unnecessary.
- (3) Speed does not require strain. Relaxation of most muscles with a moderately pleasant interest in the reading is the attitude recommended.

- (4) The most rapid reading involves the fewest and shortest fixations. Endeavor to see phrases, sentences, perhaps paragraphs, at a glance. Eliminate long stops on particular words and keep the eye movement going steadily forward without retracing.
- (5) If your mind wanders, remember that it is not going *from* this material but *toward* something else. Recognize the drive that has called you away from the job and definitely plan to take up the problem at some more convenient time. Often a note on a near-by pad will be sufficient reminder to prevent the matter from injecting itself into the reading again.
- (6) The most important advice is to try to anticipate what the author is going to say. Use the reading not passively as an attempt to absorb ideas, but as a check to discover whether or not the author is developing the idea as you would expect him to. It is seldom necessary to read every word or every sentence.

(From Watson, Goodwin and Newcomb, Theodore M. "Improving Reading Ability Among Teachers College Students." *Teachers College Record*, 31:535-36; March, 1930.)

b. New York Daily News Adaptation of the Above Rules

The best advice on the subject that we've seen was recently boiled down by two psychologists from a set of experiments they conducted at Teachers College, Columbia University. They were Professors Goodwin Watson and Theodore Newcomb. These gentlemen stated five rules for reading, which, with grateful acknowledgments to them, we condense and pass along:

(1) Don't whisper the words as you read, or form them with your lips or tongue. Don't point them out to yourself. All this slows up your reading.

(2) You do not have to strain your eyes, mind, or muscles in order to read fast. Relax; let the print flow into your mind through your eyes, instead of feverishly chasing the words with your mind.

(3) Try to see phrases, sentences and even whole paragraphs at a glance, and grab their central meaning with one clutch of the mind's fingers. Don't stop on particular words (but, if we may add a bit of advice to the psychologists', take the trouble to look up in a dictionary any word you don't understand). Make the eye movement a steadily forward one.

(4) If you find your mind wandering as you read, don't become impatient, don't further scatter your thoughts by fighting for concentration. It is some other problem which has called your attention away from your reading. Don't fight it; simply make a mental or a written note to take up that problem when you get around to it. Watson and Newcomb

found that a written memo will often push the intruding idea out of the mind until the reading session is finished.

(5) The most important rule, according to Watson and Newcomb, is to try to think out in advance what the author is going to say. Don't simply blot up his ideas. Keep your curiosity alive, and so keep up your interest in what you are reading, by asking yourself whether the author is developing his idea as you would expect him to develop it, or as you would develop it if you were doing the writing.

"It is seldom necessary," say these psychologists, "to read every word of every sentence."

Two hundred graduate students at Teachers College applied these rules in a series of six ten-minute reading sessions. They increased their average reading speed from 250 words a minute to 319. That does not matter so much as does the fact that they learned how to read without waste of time or mental or bodily energy.

(From editorial reprinted in Teachers College Record,
31 : 826-27, May, 1930.)

6. *Use assistants only for the work they can profitably do.*

Rightly used, assistants can be of very great help in your library reading. They cannot tell you what to seek, or make abstracts for you when you do not know what you wish the abstracts to show. They can run down references from clues you give, and bring these references to you with marked places for you to read and render decisions on. They need very specific directions, sample questions that will help them to read intelligently for you being:

- a. What is there in this reference bearing on this point or on these three points?
- b. What evidence on this?
- c. Does the writer agree with this point of view?
- d. What points does the writer make that are not made in such and such a reference?

III. SPECIFIC SUGGESTIONS FOR THE FOUR KINDS OF READING NEEDED IN LIBRARY WORK

1. *Scouting.*

The term *scouting*, as used in library work, comes from *pioneering* or *exploring*. It is used in contrast with exhaustive search-

ing for references, which corresponds to complete surveys made by engineers or other experts. Its purpose is to get the lay of the land as regards possibilities for library materials on your problem or topic.

If you wish to scout, first *set down precisely what you wish to scout for*. If you know that you wish to find a problem for study, that you need a bird's-eye or over-view treatment, that you must have descriptions of current practice, that you desire statistics, that you wish to read all that a given author has written in the field, you can scout profitably. But until you do have such specific purposes, scouting is a sheer waste of time. It may accidentally turn up something of value, but the chances are a thousand to one that it will not.

As the exploring *scout looks only for the main features* and does not bother with details, scouting for references should follow the same procedure. If you locate a helpful bibliography, note it, but do not stop to copy off all the entries. If you find a good over-view treatment, do not bother to accumulate a number of similar references. If you come across a list of problems that must be considered in any study of your own, take down the reference, but do not get immersed in the modifications of your own problem by these. If you locate a regular publication affording you pertinent statistics, do not linger to copy off figures. The thing to do is to get over the country of your references rapidly so you can have a rough sketch map of it and of its possibilities for your problem or topic.

The *high vantage points in library scouting*, corresponding to mountains or treetops in exploring, are lists of bibliographies, library indexes, and summaries of materials made by previous workers. You cannot know all of these now. But from this text you will gradually acquire a list of vantage points like bibliographies of bibliographies, the list of doctoral dissertations issued by the Library of Congress, the Education Index, the encyclopedias, the list of research studies of the United States Office of Education, the Review of Educational Research, and the current references in *School Review* and *Elementary School Journal*.

The highest peaks in these library aids to scouting are the sec-

tions whose headings bear on your problem. A library index will help locate such headings. For example, the Education Index almost guarantees that an article under a given heading bears on that heading, no matter what the article's title may be. See also Chapter IV.

In scouting you will often have to *decide quickly which of several references* is likely to be *most useful* to you for work on a specific phase of your problem. The best way to do this is to run quickly through such items as the following for each of the several references you are considering for the same section of your initial bibliography: Note the author, and consider his reputation, looking him up in one of the Who's Who books, if necessary. Consider the prestige of the publisher. Note the copyright date to see how recent the material is likely to be. Skim the preface to see what the book's purpose is. Glance at the table of contents to see if that promises what you wish. Turn to the index to see whether the author quotes other authorities. There ought not to be too much of this work in scouting, but if it has to be done, such procedures give the best results.

2. *Finding specific materials within a reference, particularly a book.*

A knowledge of what the different parts of a book usually show greatly expedites finding any given material in it.

The *title page* gives author and publisher. Sometimes as well, it gives degrees and position of the author, and date of publishing. This date is not as significant as the copyright date, which is usually printed on the back of the title page.

The *preface or foreword* gives the following matters, as the author sees them: Purpose of the book; scope; relationship to the whole or related fields; special contributions; method or procedure used in writing, e.g., whether it is a compilation or a critical presentation; acknowledgments which may add greatly to your knowledge of the author's sources, but usually are perfunctory. An editor's preface, if there is one, usually gives a clearer perspective of much the same material as the author's preface and adds a few statements about the merit of the book

that the author could not modestly say himself. All such material is exceedingly useful in appraising a book. Just as a supervisor has no business criticizing a teacher's instruction until she knows what that teacher aims to do, so you have no justification for evaluating a book before you know the author's purpose. His preface or his introduction will give that purpose.

The *table of contents* gives the major divisions of the book, often the major topics treated, and usually an outline with chapters and chapter subdivisions. Fiction books usually give only chapter titles. Running quickly through the table of contents of a book will give you immediately a bird's-eye view of the possibilities for your needs.

Lists of statistical tables and other special features, such as graphs, diagrams, illustrations, and maps, are often given separately for each class, just after the table of contents. Usually a particular graph or table can be located faster through the list for its class than by any other means.

A few minutes spent in acquainting yourself with the *guidepost features* of any book will save you much time in locating materials in it. Books differ greatly in these features. It is important for you to know just how your particular book attends to them. If it has an introductory chapter which sets up all the problems or topics for the whole, and a final chapter summarizing the others, these two chapters will give you the substance of the book. You will not need to read the other chapters unless you require detailed treatments. The same is true of a given chapter built on a similar pattern. In skimming, these are the parts to read first. It is also well to note how the author uses division, chapter, and paragraph headings, topic sentences, and italics, boldface, or other types. If you understand his usage in such matters, you can predict pretty accurately what kind of guideposts to watch for when you seek materials within the book.

For checking a writer's authorities, note his *reference and citation features*. Footnotes will give citations on specific points. Chapter bibliographies will give references on their phases. If there is a bibliography at the back of the book, note whether it is arranged alphabetically, is divided into classes, or follows chap-

ter divisions. Check the index to see whether it includes authors listed in the references, or only those actually named in the text proper.

You of course know that the *index* is used to find materials on various topics. You may not realize, however, that any index conforms to the thought-pattern of the maker. That is, it shows where the answers to his questions could be found. They may not be your questions. In looking at any index, then, take a minute or two to get the maker's thought-pattern. For example: Under what heads does he include the materials you seek? Does he include authors, and if so, which ones—those quoted only, or those in references also? How finely does he subdivide his index entries? Does he at the start of the index give directions or abbreviations about which you must be informed?

Appendices carry supplementary data or evidence, rare or unusual data, practical helps, and sometimes an exhaustive bibliography. In using any book with appendices, note whether they run along with the chapter titles or have entirely different headings. If the former, you can omit reading them unless you need more details than are given in the text proper.

Educational researches usually have rather conventional divisions, a knowledge of which greatly expedites finding materials in them. These divisions are: Statement of the problem; sources and methods of attack; history of the matter; review of previous studies in the field; main body of the write-up; summary of findings (sometimes with recommendations and discussion of further problems for research); bibliography; appendices. The order of these divisions may vary but it usually runs about as here given.

In dealing with *newspaper articles*, especially news items, much time can be saved by taking into account the usual style employed by news reporters. There is first the main idea expressed in the headline. Then the article frequently has three sections of increasing length, each of which tells the entire story. The first sentence, or at any rate the first paragraph, will usually cover the whole. Then there will be a second treatment in more detail. Often there is a third treatment in still greater detail. You can,

by taking this characteristic into account, cover many items for essentials by reading only the headlines and first paragraphs.

3. *Skimming.*

To skim profitably, you need constantly to do these things: Keep your purpose in mind; ask yourself whether what your eye sees does or does not bear on that purpose; relentlessly avoid pausing on items that do not so bear; apply all the knowledge about finding materials within a reference (see III, 2 preceding).

The parts of a book most important in skimming are: Table of contents; introductory and final chapters; within a given chapter, the introductory and final paragraphs; for a paragraph, the heading and the first and last sentences.

4. *Thoughtful or critical reading.*

In such reading, it is harder to keep in mind the specific purpose for which you are doing the reading than it is in the other three kinds of reading. For success in your library work, you must so keep it at all costs.

The chief purposes in thoughtful reading connected with library work are:

- a. To deal with a "problem situation."
- b. To make a critical review or evaluation of a reference.
- c. To compare views or references.
- d. To gain an introduction to a new field or topic.
- e. To do better thinking on a given problem or topic.

These purposes will be taken up in order.

- a. *Specific reading aids for dealing with a typical "problem situation" for the whole of a study or for any section of it.*

The typical "problem situation" faced by you repeatedly in your library work will contain certain steps which will require the reading indicated.

- (1) In order that a *problem* may be handled effectively, it *must first be clearly stated.*

You will need to read to get ideas about what constitutes the problem or what enters into it. You may also need to read to get ideas on how to state it clearly or on how others have stated it.

- (2) The next step is to *set up hypotheses* to solve the problem.

You will need to read for suggestions on ideas or hypotheses. You will also have to read to secure ideas, information, or evidence on the relative worth of your hypotheses so that you can cast out the untenable ones early.

- (3) The *likely hypotheses must be tested or examined critically*.

You need to read for ideas or information on methods of study or research so that you can select the best hypothesis. This involves reading to secure facts or evidence to support or negate the hypotheses. You will have to read in order to know how to handle conflicting evidence.

- (4) The *tentative conclusions, findings, or results must be formulated*.

Reading does not help one a great deal to draw conclusions. However, you can read to see how others in similar situations drew out their findings, and how they formulated them.

- (5) The *first findings must be checked and re-examined*.

This involves a second weighing of evidence and often more reading to insure that the proper methods were used and that all precautions were taken to have enough significant evidence or facts.

- (6) The *possible application of the final findings must be considered*.

You need to read for ideas on possibilities and for testing the worth of various suggestions.

b. Specific reading aids for critical review or evaluation of a reference.

It is unprofitable to attempt such a review unless you know the field of the reference and have set up definite standards for judging it. For some purposes a simple set of standards made up by you may be sufficient and may include such questions as these: Are the aims of the reference worth while and significant? Does it meet a real need? Does the book do what it aims to do? For more extensive evaluation work use the procedures advised in

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Chapter XVII. For really serious work you should use some kind of score card. See Chapter XXII, Section V, 4.

c. Specific reading aids on comparing two authors' views or references.

Follow the procedures outlined in *b* preceding for each. Then compare on outstanding points. For two books, reviews of both will be helpful if you can find such evaluations. See Chapter XVII.

d. Specific reading aids in gaining an introduction to a new field or topic.

Start with a short comprehensive treatment such as you will find in an encyclopedia or a single chapter of some book. For the book choose some elementary treatment if possible. Take pains from the outset to acquire accurate definitions of "key concepts" and fundamental terms. Follow this with several similar elementary treatments to be sure that you are not being led astray. These treatments will usually cite more extensive and difficult references which will in turn give you references sufficient to go as far as you like. In discovering elementary treatments, the right kind of book list will be helpful. See Chapter XVIII.

e. Specific reading aids to better thinking on a given problem or topic.

Although you may have gained considerable proficiency in reading for this purpose, you probably can improve markedly by following such suggestions as these:

- (1) *Recall what you already know about a topic before you begin to read on that topic.*

This procedure enables you to associate the new with the old. It also enables you to decide quickly whether you already know what is in a paragraph and so can skip it. Many people, because they enjoy the familiar, waste much time and energy reading what they already know. This suggestion, if followed, will help you to decide which paragraphs should be reflected upon and which thoughts you need to memorize. For further help on this point, see the Kitson reference (31).

- (2) *Ask questions about the topic which have not been answered by your previous reading.*

The value of this is obvious. For the psychological significance of this procedure, see the Kitson discussion (31).

- (3) *Elaborate and evaluate what you read as you read it.*

Any satisfactory treatment of the thought processes involved in this suggestion requires far more space than is available here. For such further treatments, see the Kitson (31), Clarke (29), Dimnet (30), or Headley (5 : 1-167) references, valuable in the order named.

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For *practice* in the kinds of reading needed in library work, use Number 8 of the Alexander Library Exercises. If you will go through that exercise carefully and later apply what you learn by that experience, your improved methods of library reading will save you hundreds, possibly thousands, of hours in the course of your professional life.

IV. REFERENCES FOR FURTHER READING

Call
Number

29. Clarke, Edwin L. *Art of Straight Thinking*. New York: D. Appleton and Company, 1929. 470 p.
A handbook on scientific thinking in social sciences. The first eight chapters are especially significant for one who aspires to be a thoughtful reader.
30. Dimnet, Ernest. *The Art of Thinking*. New York: Simon and Schuster, 1929. 216 p.
A popular sound treatment of the way we think.
31. Kitson, Harry D. *How to Use Your Mind*. (3rd ed. rev.) Philadelphia: J. B. Lippincott Company, 1926. 224 p.
A simple discussion of thinking in relation to study.
32. Pitkin, Walter B. *The Art of Rapid Reading*. New York: McGraw-Hill Book Company, 1929. 233 p.
A popular brief treatment based on the experience of a journalist who has done much rapid reading. Psychologically sound. Excellent practice exercises.

CHAPTER IX

NOTE-TAKING IN WORK WITH LIBRARY MATERIALS

NOTES *are the basis for nearly all productive thinking and reflection involving books.* Unless you have adequate and easily accessible notes at the time you need them most, you cannot recall what you have read accurately and fast enough for profitable thinking.

In actual library work, however, many persons are so overwhelmed by the mechanics and drudgery of their *note-taking*, that they have little time or energy left for thinking. Their difficulties arise chiefly from such causes as these: They do not distinguish between systems of notes for different purposes; they do not understand the mechanical essentials of a good note system; they do not grasp the essentials of a good note; they do not know how to read in connection with note-taking; they are ignorant of the best way to take notes on statistical data. These matters will now be discussed in order.

I. NOTE SYSTEMS

Two main systems of note-taking are needed in all good work with library materials:

I. *The system of notes on each reference in your bibliography,* merely to show what is in the publication and what it is good for.

These notes go on each card in your bibliography. If you use the same reference in different places, on any given card put the data about its usefulness for the section in which it is filed.

Besides the usual bibliographic items, you ordinarily need notes giving the call numbers and other data for locating the references. You will also need notes on the contents and methods of treatment, questions or problems raised in your mind by the

document, conclusions, and the use you think you can make of it. The blanks on the back of the Alexander Universal Bibliography Card (21) are to be used for recording data on these latter items. Abstracts are merely enlargements of such reference notes.

2. *The system of notes on materials taken out of references* for use in your study.

This system includes information, ideas, facts, statistics, and the like, taken out of the references; also your ideas, questions, comments, or other reactions toward these extracted items. It covers all the things you need to remember when you start to write up your study and for which your memory needs written helps. The notes for this system are written on different slips from the bibliography cards. It is usually operated as a system distinct from the one for your bibliography.

For purposes of clearness, the following treatment isolates phases. In actual note-taking, however, one often works on several things at the same time.

II. MECHANICAL ESSENTIALS OF A GOOD NOTE SYSTEM

I. *Possibility of easy transfer.*

This is the first essential and its implications for practical use are the following:

a. *A loose-leaf system of some kind.* Historians like Gibbons, Bancroft, and Beveridge used bound notebooks requiring elaborate indexes. But for most people, this entails tremendous strain on the memory. Even with these experienced scholars, it led to inaccuracies easily avoidable through a loose-leaf system which puts physically together notes on things that should be considered together.

b. *Provision for different sizes of materials.* To avoid unnecessary copying, you will wish to put into your notes pages or even whole pamphlets with the significant passages underlined and noted on the margins. Your filing system, therefore, ought to be planned to accommodate the largest size of paper on which you will have any significant number of notes. Most of your notes should be taken on a uniform size of paper or card. Choice

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of size varies with the individual. Half-sheets of paper, size $5\frac{1}{2}$ by 8, are cheap enough for taking one note on a slip, and are also big enough for easy use in a typewriter. Long notes are also more easily written on them than on 3 by 5 cards.

c. Use of one side of paper. Brain wear is exceedingly expensive and paper very cheap. Writing on one side of the paper saves brain wear, and so is highly economical in the long run. Your thought will be stimulated and you will see new relations that would not otherwise come to you, if you can see physically together notes that go together because they bear on the same problem or topic. If your notes are written on only one side of the paper, you can easily cut them apart and shift the parts to where they are more pertinent.

d. Exact citations are necessary so that you can always trace a note to its source. If several notes are written on the same sheet, one citation will do except for page numbers. Such notes should never be cut apart, however, until a full citation is noted on each part. The mechanical labor of making exact citations on a number of notes from the same reference may be saved up for one time. In such a case, take the first note with full citation. On the other notes, insert only pages for citation, and fasten the sheets securely with a string or a rubber band, or put them in a separate envelope. Completing the citations may be easily done later, often by assistants. Such notes should never be filed, however, until the full citation is inserted on each note. Saving up on mechanical citing in this way will release more energy for thinking about what to put in your notes, and will enable you to keep your perspective better.

e. Effective precautions to avoid loss. The first of these is to have a methodical procedure for numbering notes in a section so that you know they will stay together. This is most easily done by giving the section a letter or a number, and the notes on it are numbered to show succession or subdivisions. See Section 3 following. Filing should be kept fairly up to date. Keep plenty of your regular-size note sheets or cards with you at all times so that you can take notes when you see something good. Keep these notes in a regular place in your brief case or whatever you use

so that you will run less chance of losing them before filing. Be wary of lending your notes unless you are absolutely assured of the reliability of the borrower. Put your name and address in your brief case so that it can be readily returned if mislaid.

A note that is not accessible when you need it most is, for all practical purposes, lost. A poor system of filing heads or *careless filing will lose more notes faster than all other procedures combined.*

f. Outline or index of the filing system. Since notes will have to be filed at different times, there is grave danger of separating items that ought to go together because you cannot remember the classifications under which you put the notes at an earlier time. Accordingly, in any piece of library work it is desirable to set up as soon as possible the headings under which notes are to be filed. To start, write the headings of your working outline on the guide cards or folders in your filing system for notes. If these headings are staggered, that is, if some appear on the left and some on the right, or if there are enough materials in the folders so that the headings stand out, you can easily see all the headings and so keep the list in mind, providing you do not have many notes.

As soon, however, as the notes increase to any material number, it is desirable to make out your list of headings for the filing system on a sheet of paper and look at this when you are filing. It is best at first to make out this list with double spacing between the items. You can then correct it as experience indicates the desirability of adding new headings or shifting those you already have. When the sheet gets too blurred to read quickly, retype or rewrite it.

2. Possibilities of expansion anywhere.

The only plan of notes allowing for this easily is a 100 per cent loose-leaf system. Any other plan permits expansion anywhere only by a system of signs for insertion. With this last plan, when you need to insert a note between other notes on the same sheet, you use a marginal reference sign, say the letter "A" or the number "1" with a caret and the word "insert." Immediately behind

the sheet you put another sheet with the note to be inserted on it and the same reference sign. Thus when you read the first sheet and come to the insertion place, you will stop and look at the next sheet to find the inserted note. Such a system is irritating to most people, as compared with the 100 per cent loose-leaf system having each note on a separate sheet.

3. *Minimum amount of copying or other mechanical work.*

You can reduce copying by cutting and pasting materials that are free or items that you can purchase cheaply. On some documents that you own, you can take pages apart or cut them up, using a library copy when you need to see the whole document again. On some studies where the same document has to be used for hundreds of notes, rubber stamps giving all the citation except the pages and volume numbers, may be advisable. For most note-taking, only one note should be placed on a card or sheet, so that it can be readily shifted without recopying. This does not mean that copies of the same note should not be made for insertion in various places in your notes where it is really needed. Copying such a note for use in several places is far easier and more conducive toward its use where it ought to be used than is any possible carrying of it in your memory.

To save a great deal of energy throughout your purely mechanical work, adopt a *uniform system of note-taking* and stick to it.

Three items in particular need special attention. First, if you have the same places for putting down the same items, you will save time and be spared eye strain. Second, it will pay you to make a mechanical distinction between your own statements, the statements of others, suggestions, references to other material, and the like. Third, a uniform numbering series for headings of different value saves much energy. A good system is the following:

I.

A.

I.

a.

(1)

(a)

4. *Relative advantages of different filing systems.*

a. Card or vertical file. This has all the advantages of a 100 per cent loose-leaf system. It has the insurmountable disadvantage that when a card is lost out of it, the loss cannot be discovered. The other cards close up when a card is taken out, just as water does when a fish is pulled out of it. The larger loose-leaf filing cabinets, such as those for folders taking letter-size paper, require considerable room. If the drawer in the filing cabinet pulls out, the top of the cabinet can be used for holding books and materials.

b. Letter file. This is not flexible except in big divisions, where you use one letter file for each division. Within any file you have to lift up parts before you can get at the materials. Notes are not lost easily. It requires considerable table room and nothing can be put on top of it.

c. Accordion files. These are practically the same as letter files except that they are easy to carry around. Each accordion file corresponds to one of the letter boxes.

d. Work organizer. This is practically the same as the letter file except that it lies flat on the table, requires a great amount of table space, and cannot be used effectively if anything whatever is put on top of it.

Of the four kinds of filing systems, the card or vertical file is by far the best for all purposes in library work.

III. ESSENTIALS OF A GOOD NOTE IN LIBRARY WORK

1. *It is more than a mere topic or outline of topics.*

A topic tells nothing whatever except the subject of discussion. What you need in your notes is what was said or written about the topic.

2. *It is so definite that there can be no doubt about its meaning.*

Examples are: (*a*) A statement so clear that its meaning cannot be questioned. (*b*) An illustration so given that it can be substantially reproduced. (*c*) A collection of data that can be used as evidence. (*d*) The essentials of the writer's point of view. (*e*) The exact question raised by the writer.

3. *It has all data necessary to locate it readily, so that there is no doubt about who said it or wrote it, or where it can be found.*

If you do not keep your notes on this basis, you will suffer enormous wastes of time and energy when you later need the notes. Or you may be seriously embarrassed, for instance, by being accused of plagiarism, because you have not distinguished quoted material from your own statements. If you find in your notes a good quotation, you cannot use it safely until you know who the author is. If you know that an author has said something pertinent on your topic, having his name is only the start of finding where he said it. Your notes should cite him and also what he said and where he said it. This holds true for the initial work of locating references in a library. If, in connection with your study, you have once drawn a book that you think you will need again, you should put on your bibliography card the call number, and similar items which will enable you to locate it rapidly whenever you need it again.

4. *It is made with the idea that it is to pass through a human head before being incorporated into the final product.*

This means that it is not simply a string of quotations and it is not "total recall." It is *your* accurate account of what the man said or his position, or what the data were, and what they signified. It is *your* view of the matter indicated.

IV. READING FOR NOTE-TAKING

It saves an enormous amount of energy to go *through the whole* of an article, chapter, or book, *before taking any notes*. The best procedure is to skim it, marking all likely parts as you read. If you own the book, you can make your marks on the margins or underline passages. If it is a library book, you of course should not mark it. You can, however, handle it in much the same way by using slips of paper an inch or so wide, long enough to reach from the bottom of the page and project over the top. Make a pencil mark on the slip so that it will register with the top of the page. On the left-hand side of the slip put down any check marks or brief comments that apply to the left-

hand page. On the right-hand side do the same for the right-hand page. You thus have all the advantages of marking the book without actually putting any marks on the library copy.

After you have gone over the whole, you are in a position to know the really good parts, those on which it is worth while to take notes. If you start taking notes as soon as you read the early part of a book, you are almost certain to find that the later parts are much better worded and that later summaries and facts will be more significant for your purposes. Furthermore, the procedure here advised separates your thought from the purely mechanical phases.

The procedure here described is as important in each subsequent *re-reading* of a book for a different specific purpose as in the first reading. Even when you reach your fifth specific need for a given book, it will pay you to skim the book as a whole from this new viewpoint, before writing down any notes on this reading.

In whatever note-taking you have previously done, you will almost certainly have encountered *considerable difficulty in keeping your mind on the mechanical work*. This is due to valuable thoughts coming up while you are doing the mechanics. Day-dreaming over the ideas, or worry about forgetting them, will wreck your bibliographic work. The difficulty requires special precautions.

The only effective thing to do here is to *make a note of the idea and its implications, enough to recall it and no more*, and then toss the card in with the others. The matter having been dismissed, your mind will be at ease until the next valuable idea pops up. If you did not take the note, you would be so afraid you would forget the good idea that you could not concentrate on the necessary card work. Since you have made a note so that you do not need to worry about forgetting, you are free to return your full attention to the bibliography.

V. TAKING NOTES ON STATISTICAL DATA

Statistical data copied off correspond to notes taken on reading. *Statistics are of such a nature that it pays to have special sheets for copying and using them.* Most government offices have ruled

sheets which will save a great deal of time in copying. The Teachers College Bureau of Publications at Columbia University has a *special tabulation sheet* which folds to letter size. If folded outward, you can tell instantly what is in a given blank. This blank has 35 lines down the page and 32 columns across. Numbers down each side automatically tally items. These numbers allow you one classification, say names of cities or names of individuals; the columns across permit another set of data, such as expenditures or test records. If you have a great many cases in one table, the headings for your table may be put on the first sheet and the other sheets pinned or clipped to it. By slipping the other sheets up next to the heading you can always identify items without copying the headings on all the sheets. Until all headings are written in, tabulation sheets should never be separated from the first sheet that gives their headings.

If you are to use many sheets with the same items in the same order, say names of cities or names of pupils, the following procedure will save much time. Copy the list in duplicate, using a tabulation sheet for the top copy and thin paper for the others. Since the typing is done on a tabulation sheet, the items will register for the ruled lines on that sheet. The carbon copies of course register with the same spacing. The thin copies may be pasted on other tabulation sheets and so prevent errors in copying.

These tabulation sheets have several other possibilities for statistical note-taking. The columns can be used to separate dollars and cents. By ruling every second or third line with a heavy pencil, you can make certain columns stand out. The blanks are also useful for showing general relations through rough graphs, a form of note often taking the place of many statistics. For such notes profile graphs are particularly serviceable. They have been used to show ability of cities to support schools or pupil standing on various tests, or to present a rating of a teacher. The references at the end of this section contain examples of such graphs.

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For *practice* in note-taking, use Number 9 of the Alexander Library Exercises. This will afford you an opportunity to criticize

your present system and methods of note-taking with a view to improving them. The sooner you make your note-taking really efficient and put it in its proper subordinate place in your library work, the better and more extensive will be your thought with materials gathered from your reading.

VI. REFERENCES CONTAINING FURTHER SUGGESTIONS AND HELPS

An example of a very *elaborate system of note-taking* may be found in:

Call
Number

33. Dow, Earle W. *Principles of a Note-System for Historical Studies*. New York: The Century Company, 1924. 124 p. + examples.

A description of a very much *simpler method* of note-taking may be located in:

Call
Number

34. Hockett, Homer C. *Introduction to Research in American History*, p. 46-55. New York: The Macmillan Company, 1932.

A discussion of *note-taking written for a beginner* and containing a helpful selected bibliography (the Kitson reference therein has a good chapter on taking notes in lectures) is available in:

Call
Number

35. Bennett, M. E. *College and Life*, p. 137-47. New York: McGraw-Hill Book Company, 1933.

Helpful suggestions for making *footnotes* are presented in (23:245-247) and (26:101-115).

Examples of *graphs* easily made on tabulation sheets will be found respectively in the following publications.

Surface of Frequency

Call
Number

36. Alexander, Carter. *School Statistics and Publicity*, p. 115. New York: Silver, Burdett and Company, 1919.

Profile Graphs

School Support

Call
Number

37. Any city survey of the Field Studies Division at Teachers College, Columbia University, from 1926 to 1931, Finance Chapter.

Pupil Ratings

38. Mort, Paul R. The Individual Pupil, p. 188-89. New York: American Book Company, 1928.

Teacher Rating

39. Almack, John C. and Lang, A. R. Problems of the Teaching Profession, p. 182. Boston: Houghton Mifflin Company, 1925.

CHAPTER X

RECENT AND CURRENT REFERENCES

To MAKE this chapter most profitable for you, first skim it; then skim Chapter XI; finally return to read this chapter carefully.

How to locate recent and current references involves both books and periodical articles. The sources and index tools for the two classes of materials are largely different.

I. BOOKS

For a *brief general list* covering all phases of an education problem or topic, the Education Index (described in Section IV of this chapter) is helpful. Under the heading of Book Lists, this index enters lists on general topics, such as the Harvard Bookshelf, or lists for high school libraries. A list covering all phases of an education problem or topic appears under the name of the problem, with Bibliography for a subheading. If a book or an article has a bibliography, the corresponding author or subject entry will usually note the fact.

For a recent *brief list covering a recognized field*, say supervision or administration, the monthly lists of selected references in the Elementary School Journal and the School Review will be useful. These include periodical references as well. The "Schedule for Selected Current Reference Series" following will be useful in locating the particular number of either periodical likely to treat a certain topic. It will pay you well to find which numbers cover topics of particular interest to you.

The *card catalog of any library* will quickly yield a list of the books on a given topic, once owned. Those of reasonably recent date will sometimes constitute a fairly satisfactory bibliography of books on the topic. The catalog cards will also list any pertinent bibliographies issued in separate publications that the library happens to own, and may indicate which books have bibliog-

raphies. This procedure is, however, no better than the library involved. Some books cataloged may have been lost. The library may not have kept up its purchases, and may be behind on cataloging. For suggestions on the use of the card catalog, see Section V of this chapter.

SCHEDULE FOR SELECTED CURRENT REFERENCE SERIES OF THE ELEMENTARY SCHOOL JOURNAL AND THE SCHOOL REVIEW

This table gives the 1934 schedule which will be substantially the same for any year, starting with January, 1933. Not every head appears each year, but if any references are pertinent to a head, they may be expected in the number of the periodical indicated. This table will be particularly useful when good recent references are desired. The University of Chicago Press issues each January the combined references of the two periodicals for the preceding calendar year. In such combination, the earliest section for either periodical had to be compiled nearly a year before its latest section.

Key: E. stands for *Elementary School Journal* and S. for *School Review*.

Ablity Grouping, S. May	Junior College Organization, S. Oct.
Achievement and Administration, S. Nov.	Junior High School Organization, S. Oct.
Adjustment and Personality, S. May	Kindergarten Education, E. Apr.
Administration, Public School, E. Jan. ; S. Nov.	Learning, S. May
Agriculture, S. Mar.	Library Training, E. Nov., S. Nov.
Arithmetic, E. Nov.	Mathematics, S. Feb.
Art, E. Nov. ; S. Mar.	Measurement, S. Jan.
Articulation, S. Oct.	Mental Measurement, S. May
Backward Children, E. May	Music, E. Nov. ; S. Mar.
Behavior Cases, E. May	Occupations, S. Sept.
Blind and Partially Seeing, E. May	Organization, S. Oct.
Buildings, S. Nov.	Parental Education, E. Mar.
Business Management, E. Feb.	Part-time School and Co-operative Courses, S. Oct.
Child Psychology, S. May	Period, Length of, S. Nov.
City School Administration, E. Jan.	Personality and Character, S. May
Class Size, S. Nov.	Physical Education, E. Nov. ; S. Mar.
Commercial Subjects, S. Mar.	Preschool Education, E. Mar.
Costs, S. Nov.	Primary Education, E. Apr.
Crippled Children, E. May	Problem Cases, E. May
Curriculum, E. Sept. ; Apr. ; S. Jan.	Psychology, Education, S. May
Day, School, Length of, S. Nov.	Public Relations, E. Feb. ; S. Nov.
Deaf and Hard of Hearing, E. May	Reading, E. Oct.
Delicate Children, E. May	Records, S. Nov.
District Organization, S. Oct.	Reports, S. Nov.
Economies, S. Nov.	School Day, Length of, S. Nov.
Educational Psychology, S. May	Science, E. Nov. ; S. Feb.
English, E. Oct. ; S. Feb.	Small High School, S. Oct.
Equipment, S. Nov.	Social Studies, E. Oct. ; S. Feb.
Exceptional Children, E. May	Special Groups, S. Oct.
Extra-curriculum, S. Apr.	Speech Defectives, E. May.
Finance, School, E. Feb.	Spelling, E. Oct.
Foreign Education (General by Countries), E. June	State School Administration, E. Jan.
Foreign Language, S. Feb.	Statistics, S. June
Geography, E. Oct. ; S. Feb.	Study Methods, E. Sept. ; S. Jan.
Gifted Children, E. May	Subject Fields, E. Oct., Nov. ; S. Feb., Mar.
Grouping, S. Nov.	Subnormal Children, E. May
Guidance, S. Sept.	Summer High School, S. Oct.
Handwriting, E. Oct.	Superior Children, E. May
Health Education, E. Nov.	Supervision, E. Sept., Feb. ; S. Jan.
Higher Education, S. Dec.	Teacher Education, E. Dec.
Home Economics, E. Nov. ; S. Mar.	Teaching Methods, E. Sept. ; S. Jan.
Horizontal Organization, S. Oct.	Teaching Staff, E. Feb. ; S. Nov.
Individual Differences, S. May, Nov.	Test Construction, S. June
Industrial and Vocational Arts, E. Nov. ; S. Mar.	Vertical Organization and Articulation, S. Oct.

If the *problem is not a recognized educational one*, booklists and bibliographies for it may be located through other periodical indexes, e.g., the Industrial Arts Index (53), under the heads used in the particular index. A few minutes of inspection of any special index will show its pattern for these heads, or see Chapter XVIII, Section III. To locate possible special indexes for your purpose, consult Mudge plus the Supplements to date (6-9).

If an *exhaustive list* is desired, secure satisfactory short general lists first, note their dates of publication, examine them, and then decide how much they need to be extended. For educational problems or topics, extend by using the Education Index (51), the Cumulative Book Index (47), and Publishers' Weekly (48). For non-educational problems, expand by means of the appropriate library indexes, and then use the Cumulative Book Index and Publishers' Weekly. The library card catalog is of little value in getting an exhaustive list, for it covers only books once owned by the library. A faculty member often has many later books in his specialty than does the library of his institution. He may have review copies of recently published books.

For any problems like the foregoing that necessitate including foreign books, consult Mudge (6-9) under the head of Bibliography, subheads National and Foreign.

II. PERIODICAL REFERENCES

For *references covering all phases of an educational problem*, a recent annual volume of the Education Index will be satisfactory. A late cumulation within one year may do, but a single monthly number may not. For special treatment of this index, see Section IV following. For educational articles listed in other indexes, use the annotated bibliography in Section VII.

On a *non-educational problem*, use the appropriate periodical index. Examples are the Readers' Guide (60) and the International Index (54). The former covers popular and general publications. The latter is devoted to the more special and technical journals in the humanities and sciences. Chapter XI, second table, lists other non-educational indexes which are annotated in Section VII of this present chapter. Still other non-educational in-

dexes and further details on any such indexes may be located through Mudge (6-9).

For an *exhaustive bibliography*, use the appropriate periodical indexes for the last five years or so and the volumes of likely special periodicals known not to be covered by the periodical indexes used.

To select the appropriate periodical indexes, see Witmer and Miller (42) if the problem is clearly an educational one. If the problem is a non-educational one, the advisable periodical indexes may be located through Mudge (6-9).

For locating periodicals in special fields, see the suggestions in the references given in Section VII of this chapter.

In using *any periodical index*, you need to *know* exactly *which periodicals* of importance to you *it covers*. Any index covering a periodical is far easier to use than the bound volumes of that periodical. Any index is responsible only for covering the periodicals it claims to cover. Some years ago a research man got into serious difficulty by counting articles in the Readers' Guide (60) several years apart, on the same subject. He claimed interest in that subject was declining because the number of articles had declined. He was ignorant of the fact that during the period most of the educational journals once indexed in the Readers' Guide had been transferred to the Education Index. Actually there were more articles than before, but his neglect to check the periodicals covered by his index made him miss the truth.

Before deciding that a given periodical is not covered by the index you are using, be sure you have looked in the list in all likely positions for it. In an alphabetical list of periodicals, it will take different places according as its name is clipped, turned around, and so on, for entering in the list. This caution needs to be observed in considering several periodicals in Section I, A of Number 10 of the Alexander Library Exercises.

III. BRINGING A BIBLIOGRAPHY UP TO DATE

If a bibliography needs to be brought up to date, *first* decide whether you must absolutely have all references up to the present moment. Often, as in matters of theory, status treatments, trends,

and the like, this is not at all necessary. It may be advisable in certain new or rapidly developing fields, e.g., public forums, orientation courses, scientific discoveries, educational reorganization, and the like.

If *complete up-to-dateness* seems essential, you need to go beyond all library indexes which at best are a month or so behind. On *books*, Publishers' Weekly (48) brings you to the current week. Very recent books in special fields may be located from announcements of publishers, which are often sent in advance of publication, or from appropriate magazines in the field. Such periodicals, e.g., Elementary School Journal in its field, and School Review in secondary education, often have regular departments listing publications received long before the latter are reviewed or otherwise noticed.

On *periodicals*, the only way to secure later articles than those listed in the pertinent periodical indexes, is to examine the latest issues of relevant magazines. The latter may be found by the procedure outlined in the latter part of Section II above.

IV. EDUCATION INDEX (51)

This index is so unique for educational workers as to merit treatment apart from periodical indexes in general. It began January 1, 1929, and that date is about as significant in educational research as the year 1 A.D. is for the Christian Era. Before that time, it was a tremendous task to canvass all sources for references on an educational problem. Since then, the task is much simpler. All students of education have great reason to feel thankful that we now have the Education Index.

The Education Index *aims to list*:

1. All educational books in the United States, including texts for educational classes, but not elementary and high school texts.

Usually a book is listed within a month or so after publication, but as the editor is interested in getting books accurately classified, a book is not entered until it has been seen. Some publishers do not send books promptly, so that in some cases it may be six months before a book is listed. In all work where a list of educational books must be brought fully up to date, the Education

Index should be supplemented by the Cumulative Book Index (47) and Publishers' Weekly (48).

2. All articles in many important educational periodicals.

3. Additional educational articles appearing in non-educational periodicals covered by the Wilson Company indexes which at present are the Agricultural Index (49), Industrial Arts Index (53), International Index to Periodicals (54), and Readers' Guide to Periodical Literature (60).

4. Many bulletins, reports, and special publications of interest to educators.

From time to time the Education Index has *added periodicals* not originally on the list. When a periodical is added, the effort is made to go back to its start if that date is later than January 1, 1929, or to the latter date if it was then being issued. To avoid missing such a periodical, examine the list of publications covered in the last available issue of the Education Index.

For *dates covered*, the Education Index attempts only the period since January 1, 1929. However, there was for the one year of 1928 a somewhat similar publication, the Loyola Educational Index (55). Before this, the only generally accessible substitute was a use of both the Readers' Guide (60) and the International Index (54). At Ohio State University, the Bureau of Educational Research had a card file operated by the expert who was later the first editor of the Education Index (70). This card file extends the Education Index back substantially to about 1920, and on important references somewhat earlier. Since the Education Index started, the Ohio card file has specialized on additional material not covered by the Index. Teachers College, Columbia University, has a complete copy of the Ohio file, kept up to date in the Reference Room of its library. Thus researchers who can visit Ohio State University or Teachers College can extend their use of the Education Index approximately back to 1920 and supplement the Index references since 1928. In only these two places is the Ohio file accessible.

In using this index, as in the case of any index, you need to *be sure you have all the numbers covering the period involved*. The numbers within a year appear in paper covers, having across the

front cover, near the top, a line indicating how each number joins to the previous numbers. The original cumulation and the subsequent annual volumes are bound in cloth with the dates covered stamped on their backs. By checking these dates and taking the necessary paper numbers, you can quickly cover the period since 1928 of interest to you.

An educator often needs *to locate data on a recent book from vague or entirely erroneous references*. He may not know who the author is. He may have the title entirely wrong. He may have the author's name spelled with a wrong initial letter. He may not know the publisher or may not have time to write the latter. The Education Index will solve his difficulties if he knows how to use it.

Locating a book under such conditions can be achieved only by exercising all your ingenuity in searching under likely author and subject heads. If the exact date of publication is not known, you have to think of the most likely date for it and use the corresponding number of the Education Index, working out both sides of that number until the item is located.

Schoolmen frequently desire to know if there is a *new edition of an old education book*. This can be found under much the same conditions and in much the same way, by using the Education Index. The Index is not so good for this purpose as is a combination of the United States Catalog (45), the Cumulative Book Index (47), and the Publishers' Weekly (48), but it is often more accessible.

On *indexing and special features*, note the following:

1. The *heads* employed are the usual library ones and those likely to occur to users.

References are often missed by users of the Education Index because they have not looked under the proper heads and sub-heads. There is no standard prescription on how to find these. Only experience and practice will make one skillful in this matter. Nevertheless, it helps some users to remember that any classification in any index is largely a product of some one mind and that trying to track that mind will give the probable heads more quickly. The editor of any index of course tries to conform to

standard library classifications and to anticipate the questions and needs of all users. However, after all these things are provided for, the classification must still run largely according to the editor's thought-patterns.

- a. *General articles*, when not too numerous, appear directly after their head. If very many, they will be classified by subheads, of which Bibliography is often one.
- b. *Subheads* are used wherever the number of references in any classification is large. The order of subheads is: first, general articles; next, type of school; and then countries or states. Subheads themselves and articles within any classification run alphabetically.
2. The *indexing includes* both *author and subject* entries in one alphabetical arrangement.
 - a. *Author entries* give full bibliographic data.
 - (1) An *editor* is used as an author.
 - (2) Articles *by* an author *precede* those *about* him.
 - b. *Subject book entries* are simplified and lack some of the data to be found in the corresponding author entries.
3. *Abbreviations* in the references may be interpreted by the key at the end of the list of periodicals covered. Such a key is customary in any library index.
4. *Book lists* appear under that head, classified by subject, and the same items appear also under the same subjects as main heads, usually with a subhead of Bibliography.
5. *Book reviews* are all listed under that head, alphabetically by author. Unless you know the author, you must find the latter's name by getting it from a book entry under some subject head.
6. *Courses of study* are listed in the check lists at the front of paper-bound copies only and are not cumulated. Some of the same items appear under the heading of Courses of Study with subheadings by kind of school, e.g., Elementary. Others are entered under the subject treated, with a subheading of Courses of Study, and still others are entered under the school district issuing them.
7. *Departments appearing regularly* in periodicals are listed under the subject treated. An example is the department, "New

Government Aids to Teachers" (a department of School Life), regularly entered under the heading of Government Publications.

8. *Meeting dates* for future educational meetings are listed in the front pages of paper-bound copies only.

9. *New books* appear classified in the check lists in the front of paper-bound numbers only. The same items are also entered in the body of the index where they are much harder to find.

10. *New editions of old books* are noted under their author entries in the body of the index.

11. *Poems* are all listed under that head, alphabetically by title, unless the author is very well known.

12. A *portrait* of an educator is shown by the symbol (por.). This holds for a portrait used in connection with a periodical article, and for a portrait of a prominent educator published separately in a magazine.

13. *Publishers' addresses* are listed in the front pages of every number. While this is not a complete list of all educational publishers, it includes the most important ones. To reach a publisher quickly, you need to have his correct address.

14. *Articles on individual schools* are entered under the name of the city in which the school is located.

15. *State documents* are listed in the check list at the front of each paper-bound number. The same items also appear under the name of the state in the body of every issue or cumulation.

The *price* of the Education Index is on a service basis and depends on the number of periodicals covered by it taken by the library buying it. If a library has purchased it, any teacher in the educational institution concerned can buy the service for \$7.00 yearly. This service covers all numbers and volumes issued in that period. If no library is involved (but the publishers of the Education Index will sell to an individual only if the legitimate library has subscribed), any educator can buy the service for \$7.00 annually.

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For *mastery of the Education Index*, do the practice in Number 10 of the Alexander Library Exercises. If you aspire to ade-

quate knowledge of the professional literature of your field, you must know how to use this index. Moreover, mastery of it will make your use of other library indexes much easier, since many of the skills and techniques acquired will carry over to the use of other such indexes.

V. LIBRARY CARD CATALOG: HOW TO USE EFFICIENTLY

You can save a great deal of time and energy in your inevitably frequent use of the library card catalog by following these suggestions:

1. *Each card* is really a *reproduction of the title page of the corresponding book*. The name of the author is the latest, most accurate, or best known one. The subject is in the form of a noun, the most common, simple, and exact ones being used.

2. *Analytical cards* refer only to parts of books, a chapter or a section treating a particular topic. Example: A brief biography, one of a collection.

3. To look up *call numbers for a long list of book references* on a given topic, use the subject heading first, and then the author headings if necessary. The cards for the subject heading will probably be in one drawer. The author cards will be in many drawers, some of which are practically certain to be in use by others.

4. To look up *one reference*, use the author card except for very common names like Smith or Jones, the latter being especially useless if you do not know the first name of the author. With such common names, look for the references under some suitable subject heading.

5. *If you cannot locate a reference* under the subject heading, try the author heading, and vice versa.

6. Always keep your own *reference cards* in *alphabetical order* under whatever *divisions* you are using.

7. Know the meanings of the *abbreviations* used on the catalog cards, looking up the meanings if necessary, such as: Rev. for revised; ed. for editor; comp. for compiler; cm. for size in centimeters; illus. for illustrations; half title for name of series to which book belongs.

8. *Knowing the general scheme of the numbering system* used in the particular library card catalog involved, particularly the numbers applying to your special field, will help you greatly.

For the *classification numbers* in the Dewey Decimal System, see Headley (5 : 296-305). For those in the Library of Congress system, see:

Call

Number

40. United States. Library of Congress. Classification Division. Classification; Outline Scheme of Classes. Washington: Government Printing Office, 1926. 25 p.
41. United States. Library of Congress. Classification Division. Classification; Class L, Education (second edition). Washington: Government Printing Office, 1929. 183 p.

VI. EDUCATIONAL RESEARCHES

For additional suggestions on running down educational researches, see Chapter XXIII.

VII. REFERENCES FOR FURTHER READING OR EXAMINATION

To *start* on reading for this field, take the pertinent parts of Headley (5). This will be useful also for brief notes in popular style on any particular library tool or index, e.g., the Cumulative Book Index (47) or the Industrial Arts Index (53).

For notes on *periodical guides or indexes of special interest to educators*, consult:

Call

Number

42. Witmer, Eleanor M. and Miller, Margaret C. "Guides to Educational Literature in Periodicals, Indexes, Abstracts, Bibliographies." Teachers College Record, 33:719-30, May, 1932.

For a *full description of any particular library index*, look up the name of this index in the index to Mudge (6-9).

A *list of educational periodicals* appears in every number of the Education Index, and includes the more important ones. A fuller list appears each year in the Handbook of the Educational

Press Association, obtainable through the Director of Publications of the National Education Association at Washington. A longer list, but still not complete, is found in Severance (62).

For *notes on educational periodicals in special fields*, look under the names of the special fields in the Alexander research pamphlet (10).

For *lists of current periodicals of all kinds*, Severance (62) is most convenient for the United States and Canada, and Ulrich (63) for foreign countries.

For *details, descriptions, directions, and specimen pages of the Education Index and other indexes* widely used in this country, see:

Call
Number

43. Cataloging and Indexing Service of the H. W. Wilson Company, Advanced Course, January 1933. New York: The H. W. Wilson Company, 1933. 32 p.

Single copies obtainable free from the company at 950-972 University Avenue, New York City; in quantity for classes at 4c each.

For good brief treatments on the *use of the library card catalog*, see Headley (5 : 282-306) and:

Call
Number

44. Hutchins, Margaret and Others. Guide to the Use of Libraries (abr. ed.), p. 11-32. New York: The H. W. Wilson Company, 1928.

For *catalogs of books* giving full bibliographic data and coming down to the current week, use the combination here given. For additional notes on them, see Witmer and Miller (42) and Mudge (6-9).

Call
Number

45. United States Catalog (4th ed.). New York: The H. W. Wilson Company, 1928.
The most complete list of American books published from 1898 to 1928.
46. United States Catalog Supplement. New York: The H. W. Wilson Company, 1932.

Call
Number

Made up from the Cumulative Book Index, this and any later supplements will add to the United States Catalog until the next edition of the latter.

Beginning in 1929, this combination has become a world list of books published in the English language.

47. Cumulative Book Index. New York: The H. W. Wilson Company. Monthly.

Cumulates the monthly numbers every two months, for six months in July, and annually in December. A cumulation for 1933-1934 is scheduled for publication.

There is no need to use it for the periods covered by the United States Catalog and Supplements if these latter two are available.

48. Publishers' Weekly. New York: R. R. Bowker Company.

While this has been issued for many years, there is little need to use it except for the few weeks since the last number of the Cumulative Book Index. By its use, you can come up to the current week.

The *periodical guides and indexes of most use to educators* are those listed here. Any one will cover also many books and pamphlets in its field. For additional notes on any index, see Witmer and Miller (42) and Mudge (6-9).

In using any library index for periodicals, be sure to *note just how it cumulates*. The particular scheme of cumulation will be explained in the front part of any cloth-bound cumulation and on the front cover of any paper number.

Call
Number

49. Agricultural Index. Monthly, except December. New York: The H. W. Wilson Company, 1916—.

Valuable for articles on rural education, teaching of agriculture and educational sociology. Covers over 125 agricultural journals as well as experiment station literature, publications of the United States Department of Agriculture, and selected publications of extension divisions of state institutions.

50. Art Index. Monthly, except July and August. New York: The H. W. Wilson Company, 1930—.

Covers over 149 art and museum publications.

Call
Number

51. Education Index. Monthly, except July and August. New York: The H. W. Wilson Company, 1929—.

Described at length in Section IV of this chapter.

52. Index to Legal Periodicals and Law Library Journal. Quarterly, January, April, July, and October. New York: The H. W. Wilson Company, 1914—.

Valuable for materials on the legal aspects of education.

53. Industrial Arts Index. Monthly. New York: The H. W. Wilson Company. 1913—.

Indexes over 235 periodicals on business, finance, applied science, and technology. Useful for the school administrator, the business manager, and the teacher of applied arts or sciences.

54. International Index. Six times a year. New York: The Wilson Company, 1913—.

Indexes over 240 journals containing articles on pure science and the humanities. Up to the end of 1928, it carried the technical and specialized research articles in education that have since been transferred to the Education Index.

Up to 1920, this was called Readers' Guide Supplement.

55. Loyola Educational Index. Chicago: Loyola University Press. Volume I, for the year 1928 only.

For this one year, this served much the same purpose as the Education Index, upon the appearance of which it went out of existence.

56. Poole's Index to Periodical Literature. (3rd ed. rev.) Boston: Houghton Mifflin Company, 1802-1881.

57. Poole's Index to Periodical Literature Supplements. Same publisher, 1882-1906.

The best sources for periodical literature for the nineteenth century. For educational articles, use the headings of Education, Pedagogy, and Teaching.

58. Psychological Index. Annually. Princeton, N. J.: Psychological Review Company, 1894—.

Books and periodicals in all languages. The 1923 volume lists the periodicals covered.

59. Public Affairs Information Service. Weekly. New York: Public Affairs Information Service, 1915—.

Especially valuable for materials on educational legislation, recent government publications, educational directo-

Call
Number

ries, and monographs or bulletins of interest to school administrators.

60. Readers' Guide to Periodical Literature. New York: The H. W. Wilson Company, 1900—.

Covers articles of a popular and general nature. Before 1929 it covered many educational journals which have since been transferred to the Education Index. Superseded Poole's Index, which see.

61. Readers' Guide Supplement. New York: The H. W. Wilson Company, 1907-1919.

The original form of the International Index, which see.

62. Severance, Henry O. A Guide to the Current Periodicals and Serials of the United States and Canada. (5th ed.) Ann Arbor, Mich.: George Wahr, publisher, 1931. 432 p.

Name, date of starting, address, price.

Alphabetically by name of periodical, with an index which requires considerable work to look up the periodicals in a given field.

Omits college and university official bulletins and circulars and publications of societies and associations which do not appear oftener than annually. Includes United States Government periodical publications and those of state agricultural colleges and experiment stations.

63. Ulrich, Carolyn F. Periodicals Directory. A Classified Guide to a Selected List of Current Periodicals, Foreign and Domestic. New York: R. R. Bowker Company, 1932. 323 p.

Pp. 1-258, Classified List of Periodicals, giving name, date of starting, address and price.

Very convenient for getting periodicals in one field.

Not exhaustive and includes only titles appearing oftener than once a year.

Pp. 261-288, Bibliographies of Periodical Literature.

New edition scheduled.

64. Vertical File Service Monthly. New York: The H. W. Wilson Company, 1932—.

Valuable for pamphlets and ephemeral materials, particularly those that are free, or at a low price. Records pamphlets available with descriptive notes and price.

CHAPTER XI

OLD REFERENCES

How to locate old references (those more than a few years back) involves both books and periodicals. The procedures are extensions and modifications of those used in locating recent and current references. The student should not attempt to locate old references until he has read carefully Chapter X, which deals with recent and current materials. He will be much better prepared if he has also done the corresponding practice in Number 10 of the Alexander Library Exercises.

I. EXISTING BIBLIOGRAPHIES

The chances are at least a hundred to one that on any problem or topic of interest to an educator there is a printed or mimeographed bibliography which he should endeavor to find. Often there may be many such bibliographies. One of these may not be worth much, but it will usually cite several older references, and sometimes still older bibliographies.

To start on a search for older references, *seek brief over-view bibliographies* and follow their leads. If the problem has been recognized for some years, the article in any good encyclopedia will probably have a good brief bibliography of this over-view type. Similarly, an educational book likely to treat the problem in a separate chapter is just as likely to have such a bibliography at the end of the chapter. Thus you can safely expect to find an over-view bibliography on secondary education in a book on orientation in education, or one on physiology in a general science book, or one on attendance in a school administration textbook, and so on. Practically all textbooks used in teacher-training institutions have such bibliographies for all topics given separate chapter or large-section treatment. Another excellent source for such a bibliography, particularly on broad phases of educational

theory and practice, is the A. L. A. Catalog and its supplements (72, 73).

The next step is to *scan lists of existing bibliographies*. There are many such lists, the most important of which are noted here.

For *printed lists of educational bibliographies published before 1929*, the following will be available in many institutional libraries. If and when the Monroe and Shores publication appears, it will probably be much better to use than the combination of the other Monroe references.

Call
Number

65. Monroe, Walter S. and Asher, Ollie. A Bibliography of Bibliographies. University of Illinois, Bureau of Educational Research, Bulletin No. 36, June, 1927. Urbana, Ill.: University of Illinois, 1927, 60 p.

The objective of this bulletin is to give an idea of the material covered, without an examination of the bibliography itself. The material on each item covers (1) period; (2) types of sources; (3) degree of completeness; (4) annotations; (5) scope.

Material is arranged alphabetically by topical index. Two hundred and thirty-one items. Some of the bibliographies are old, having been published as far back as 1908.

66. Monroe, Walter S., Hamilton, Thomas T., Jr., and Smith, V. T. Locating Educational Information in Published Sources. University of Illinois, Bureau of Educational Research, Bulletin No. 50, July 8, 1930. Urbana, Ill.: University of Illinois, 1930. 142 p.

The fifth section, a bibliography of bibliographies, includes 601 items and supplements the 1927 bulletin by Monroe and Asher, noted immediately preceding.

Alexander, Carter. Educational Research (10).

This does not cover so wide a range of educational topics as the two preceding references, but is better on school administration sources and lists bibliographies published later.

67. Monroe, Walter S. and Shores, Louis. A Catalogue of Bibliographies and Summaries in Education to June 30, 1935. New York: The H. W. Wilson Company. Tentatively scheduled for publication.

The present plans are to have the Education Index continue the work after July 1, 1935.

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For supplementing the foregoing, *three unpublished lists* are available at Teachers College, Columbia University:

68. Research Index* in Professor Carter Alexander's Office.

This card index lists all the bibliographies noted in the three published references in the section just preceding, as well as many other bibliographies. It is particularly strong on administrative phases, and includes many clues to additional sources. It seldom gives library call numbers.

69. Bibliography of Bibliographies,* Reference Room, Teachers College Library.

A card file also including the University of Illinois bulletins and Dr. Alexander's Educational Research pamphlet bibliographies, as well as many other bibliographies noted from time to time by the library staff. It is better on many non-administrative topics than is the Research Index, lacks the latter's notes on sources, and has far fewer references. Its entries have the advantage of library call numbers.

70. Ohio File, Reference Room, Teachers College Library.

This supplements the bibliographies in the Education Index and in many ways extends it back to about 1920. See also Chapter X, Section IV, paragraph on dates covered.

Bibliographies of *researches on educational problems* may be located in the sources given in Chapter XXIII. Many of the individual researches in the bibliographies there cited have bibliographies of their own.

For *non-educational problems or topics*, the best over-view book bibliographies are in encyclopedias and the A. L. A. Catalog and supplements (72, 73). Extensive bibliographies should be sought through Mudge (6-9) and in the card catalog of the library used. The periodical index covering the problem's field may turn up still others.

II. EXTENDING EXISTING BIBLIOGRAPHIES

To extend existing bibliographies, especially if exhaustive lists are desired, is very exacting and laborious work for which few profitable specific directions can be given at this stage. In brief, it requires combing all likely library indexes, book catalogs, and

* It is impossible to make these two card files duplicates, so a user should examine both. On a given topic, use of both will often give far more bibliographies than could be noted from one only.

volumes of periodicals not covered by library indexes. A few specific suggestions, however, are possible now.

To start, *check carefully to avoid unnecessary duplication* of work. For example, there is no need to look through lists of bulletins of the United States Office of Education if you know they are covered by the indexes used by you. The work of extending bibliographies exhaustively cannot be successfully done until considerable knowledge of sources is acquired—at least the high spots in all phases of this book. To be sure you have covered the most likely sources, check with those listed in Witmer (130), cited in Chapter XXIII, Section VI.

For *exhaustive lists of books*, the American Catalogue of Books covers 1876-1910 (71). The United States Catalog (45, 46), beginning earlier than 1910, had various editions until 1928. It has had supplements since which serve to cumulate the annual numbers of the Cumulative Book Index (47). The Publishers' Weekly (48) will come up to any current week. For detailed information on any of these library tools, as well as on catalogs of still earlier books, see Mudge (6) under the head of National Bibliography, American.

None of the foregoing is of much use in locating *educational researches*. To locate these requires such special knowledges and procedures as to warrant separate treatment in Chapter XXIII.

For *periodical references before 1929*, the ones of *most interest to educators* are adequately treated in Witmer and Miller (42). The two tables of that reference are given here for your convenience. The Vertical File specializes on free or inexpensive pamphlets (64).

Non-educational periodical references before 1929 are occasionally of great importance to educators. They are most likely to be found in the Readers' Guide (60) or International Index (54); special-field indexes like Psychological Index (58) or Industrial Arts Index (53); abstracts for particular fields such as those now available in biology, psychology, and social science. The special-field indexes and abstracts are easily found through Mudge (6-9) or your reference librarian.

For *bringing extensions of bibliographies up to date*, follow the

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suggestions in Chapter X, Section III, and use the tables of the Witmer and Miller article (42) following in this present chapter. The authors of that article have kindly consented to the reproduction of the tables here, with additions by the present writer.

WHICH PERIODICAL INDEXES TO USE IN AN EDUCATIONAL RESEARCH

From "Guides to Educational Literature in Periodicals" by Eleanor M. Witmer and Margaret C. Miller. Teachers College Record, XXXIII : 724-25, May, 1932.

(Reproduced by special permission of the authors.)

TABLE I: YEARS COVERED BY VARIOUS INDEXES

Index	1802-1899	1900-1910	1910-1920	1920-1930	Current Years
Agricultural Index			1916		
Art Index*				1930	
Education Index				1929	
Index to Legal Periodicals and Law Library Journal*			1914		
Industrial Arts Index			1913		
International Index				1920	
Loyola Educational Index*					1928 only
Poole's Index	1802-1881				
Poole's Index Supplement		1882-1906			
Psychological Index*	1894				
Public Affairs Information Service			1915		
Readers' Guide		1900			
Readers' Guide Supplement		1907	1919		
Vertical File*					1932

* Added by Professor Alexander.

OLD REFERENCES

III

TABLE II: CHRONOLOGICAL ORDER IN WHICH INDEXES SHOULD BE CONSULTED FOR CERTAIN TYPES OF INFORMATION

Subject	1802-1900	1900-1910	1910-1920	1920-1930	Current Years
Education in Educational Periodicals	Poole 1802-1881				
		Poole's Supplements 1882-1906			
			Readers' Guide 1900-1929		
			Readers' Guide Supplement ¹ 1907-1919		
				International Index 1920-1928	
				Education Index 1929-	
				Loyola Educational Index ²	
				1928 only	
Education and General Literature in Lay Magazines	Poole 1802-1881				
		Poole's Supplements 1882-1906			
			Psychological Index ² 1894-		
			Readers' Guide 1900-		
				Industrial Arts Index ² 1913-	
				Index to Legal Periodicals ² 1914-	
				Public Affairs Inf. Service ² 1915-	
				Agricultural Index ² 1916-	
				Art Index ² 1930-	
General Literature in More Scholarly Periodicals	Poole 1802-1881				
		Poole's Supplements 1882-1906			
			Readers' Guide Supplement ¹ 1907-1919		
				International Index 1920-	
				Vertical File ² 1932-	

¹ Name changed to International Index in 1920. ² Added by Professor Alexander.

III. REFERENCES FOR FURTHER STUDY AND USE

To begin further study of this topic, *review* the important facts presented in Headley (5) under the topics Periodical Literature, and Book Literature. These will contain brief descriptions of the indexes and guides to be used in finding references before 1929.

For a *more complete list of existing bibliographies* on educational topics than is given in Section I of this chapter, use pages 24-26 of Alexander (10).

For information regarding *likely sources* of references for *extending a bibliography*, see Witmer and Miller (42). This also will be valuable for notes on periodical indexes of interest to workers in education.

For locating *educational researches* completed or under way, use the references given in Chapter XXIII.

For *bibliography under a particular subject*, especially non-educational topics, look under that subject in Mudge (6-9).

Other references cited in this chapter and not previously listed with bibliographic data are:

Call
Number

71. American Catalogue of Books, 1876-1910. New York: Publishers' Weekly, 1876-1910. 9 volumes at different dates.

Aimed to list all books (with certain exceptions) published in the United States and available for purchase at the date of the particular volume including them. Full description in Mudge (6 : 288). Since 1910 the place of this catalogue has been taken by the United States Catalog (45, 46).

72. A. L. A. Catalog, 1926. Chicago: American Library Association, 1926. 1295 p.

A well selected list of 10,000 annotated book references, classified under the Dewey Decimal System with an index for authors, subjects, and titles.

73. A. L. A. Catalog, Supplement, 1926-1931. Same publisher, 1933. 330 p.

Adds 3,000 titles on same plan, published from 1926 to 1931.

CHAPTER XII

GOVERNMENT DOCUMENTS

GOVERNMENT documents constitute the best source for the history of the development of the American people, particularly for political, social, and economic matters. They are the primary source for most statistics. In recent years they include many treatments of practically all topics of current interest, as well as researches not so satisfactorily obtainable in any other place.

The beginner is often terrified at the thought of working with government documents. Once you understand their special nature and that of the indexes required, however, you can use current documents readily. They are then no harder to work with than are magazines which require the use of special indexes. Profitable work with old government documents requires considerable special knowledge and experience. The following treatment will give you the high spots in a start on acquiring such knowledge. The references will enable you to go much further.

I. KINDS OF GOVERNMENT DOCUMENTS

A good definition is that of Wyer (86:5):

A "Government Document" (and this term is better than the too commonly used "public document") is any paper, map, pamphlet, or book, manuscript or printed, originating in, or printed with the imprint of, or at the expense and by the authority of, any office of legally organized government.

Government documents may be considered in *three major classifications*, federal, state, and local (city, village, county, or township). These classifications are convenient because the publications of the three different levels of government must be located through three different sets of check lists or indexes, although all three kinds of publications are often available in the same library.

One would naturally expect to find any *government manuscript* at the seat of the government concerned.

The following are *types of government publications grouped according to content*:

1. *Journals and proceedings.* Every legislative body of any level of government has a "journal" giving the minutes of its meetings and "proceedings" which contain the debates and speeches. Most of these are published in forms varying from separate volumes for the United States Senate or the assembly in a state legislature, to an article in the local paper for a city.

2. *Directories and registers.* These are obviously necessary and vary from mere lists giving names, titles, and addresses for all workers in the government unit, to special rosters for separate divisions of the government. Some of these publications give biographical data, e.g., the Congressional Directory.

3. *Rules, regulations, instructions, orders.* These are issued by departments or bureaus and are often known as "orders" or "manuals of instruction." They vary all the way from large volumes for federal departments to mimeographed sheets in cities.

4. *Laws.* The laws of all governments are published for each legislative session and then brought together from time to time with the previous laws in other and larger publications. In addition, each important branch of any government often issues a compilation of the laws relating to its special work. Examples are the income tax laws of the federal government, the hunting and fishing laws of a state, and the ordinances governing automobiles in a city. Practically every state has such a compilation of its education and child labor laws.

5. *Reports.* Practically every government body is required by law to make a report on its work at certain times, often annually. The larger the government unit, the more likely is this report to appear as a separate publication. In smaller cities, these reports are often printed in the local papers. If not published, they may be expected to be found in manuscript form, that is, in the "archives" of the government concerned.

6. *Researches, studies, and investigations.* These cover specific problems, as a rule, and become more frequent as the unit of

government increases in area. They may be carried on by regular governmental officials or by commissions temporarily appointed for the specific purpose.

7. *Publications designed to meet popular needs and impress the public with what the government is doing for the people.* These have increased greatly in recent years and include bibliographies, reading lists, and training manuals for meeting popular needs. For impressing the public, there are periodicals and press releases. Much of this material consists of reprints or mimeographed sheets.

Government publications are usually issued in series. The numbering often runs from 1 on from the first issue but sometimes starts anew each year, e.g., Bulletin, United States Office of Education, 1934, No. 3. In some instances the numbering scheme is intricate. For instance, the twenty-eight separate monographs of the National Survey of Secondary Education were all parts of Bulletin, United States Office of Education, 1932, No. 17. Reports, bulletins, and circulars constitute the most common series. Reports cover anything from periodical decisions of a tribunal to real reports. Bulletins contain more permanent material and circulars less permanent items and instructions.

II. HOW TO LOCATE GOVERNMENT DOCUMENTS

I. *Preliminary hints.*

Before you can profitably do much with the documents of any government, or know which division is likely to issue the materials you need, you must *know something about the machinery and operations of that government.* Wyer (86 : 8-11) has a very convenient tabulation of federal, state, and city governments with particular reference to document-issuing offices. The necessary background information for the federal government appears in the Congressional Directory (157); for any state government, in some legislative manual, commonly called "The Blue Book" or by some similar title, and issued by some state officer, such as the secretary of state; for any city government, in some publication like the manual of the common council.

The official body responsible for a *government document* is

considered to be the author and is so entered in the indexes, even though the real author's name is mentioned somewhere in connection with the title. This differs from the authorship of ordinary books. It is his work as an official of the government that is important, not his efforts as an individual. This is especially true in administrative publications.

The method of publication should be noted. Many documents in the past, particularly in the federal and state governments, were issued first in "separates" by departments and then in a "collected" edition. For the years in which this procedure was followed, you have therefore two chances to locate such a document in a library. Unfortunately, economy measures in recent years have often prevented the "collected" editions issued formerly. These editions had great value for preserving chapters or sections easily lost in their separate form. A good example is the Biennial Survey of Education, which is a bulletin of the United States Office of Education. This is composed of chapters previously issued as separate bulletins.

Any items connected with the *series and numbering* of a government document are very important in locating it. If the title notes it as a Report, a Bulletin, a Circular, a Monograph, or the like, you must look for it in the precise series indicated in the title. Since there will be many numbers in any series, the exact number in the series, or the year with its number, should be taken down accurately.

2. *Federal documents.*

For *scouting* on likely references on any problem, you will find very useful the price list of the available publications of the federal department likely to publish on the problem. This list will not be complete, since some of these publications will be out of print. Over seventy such price lists by departments, free upon application to the Superintendent of Documents at Washington, are issued annually. They enter references under subject headings alphabetically arranged. Each price list usually has a list of most of the other price lists and the Weekly List of Selected Government Publications sometimes has such a list. The Price List for

Education is No. 31 and includes Agricultural and Vocational Education and Libraries.

Beginning in 1926, *The United States Daily*, and its later weekly form, *The United States News*, have carried lists of the most important documents as issued. The *Weekly List of Selected United States Government Publications*, free upon request to the Superintendent of Documents at Washington, began in 1928. It is highly useful for the documents noted in its rigidly selected list, which is arranged alphabetically by subject, and for its prompt appearance. Public Affairs Information Service (59) since 1915 can be used to pick up references to federal documents that have been the subject of published discussion, addresses, periodical articles, and the like. This index does not always list the documents directly. Very recent publications of the United States Government are also listed in these periodicals: *The Booklist*, a monthly of the American Library Association; *The Congressional Digest*; and *School Life*.

For *exhaustive searching*, the following indexes should be used. The earlier ones are of course useful only in libraries having large numbers of the early documents.

Before 1881

Call
Number

74. Poore, B. P. *Descriptive Catalogue of the Government Publications of the United States, 1774-1881*. Washington: Government Printing Office, 1885. 1932 p.

1881-1893

75. Ames, J. G. *Comprehensive Index to the Publications of the United States Government, 1881-93*. Washington: Government Printing Office, 1905. 2 v.

1893—

76. *Document Catalog. United States. Superintendent of Documents. Catalogue of Public Documents of . . . Congress . . . and of Other Departments of the Government of the United States*. Washington: Government Printing Office, 1896—.

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Catalogs by author and subject and minutely analyzes annual department reports. Covers documents independently printed by departments. Usually about three years late in appearance.

Since the last volume of the Document Catalog, but also 1895—

Call
Number

77. Monthly Catalog. United States. Superintendent of Documents. Catalogue of United States Public Documents, 1895 to date. Washington: Government Printing Office, 1895—.

The December number indexes July to December, and the June number covers the full year ending June 30th. Usually a month late.

78. Document Index.

This covered the sessions of Congress from 1897 through the 72nd Congress, but was then discontinued. See Wyer reference (86 : 36) or ask your reference librarian.

For a good *bird's-eye treatment of federal documents*, see Wyer (86:5-38). An *exhaustive treatment* with many references by departments, and minute descriptions of the departments and their publications and special indexes, appears in Boyd (85).

Most *federal documents dealing with education* are issued by the United States Office of Education. For specific treatment of whose publications see Chapter XIII.

3. *State documents.*

State documents are considerably harder to locate than are federal documents. For *scouting* on state documents, Public Affairs Information Service (59) is useful since 1915 for all documents likely to be the subject of discussion, debate, or periodical articles. It does not always index the documents directly. Since 1928, the Education Index (51) notes most state documents on educational topics. In paper numbers of the Index, these are most easily found in the Check List of Public Documents in the early pages, this covering only one month. The cumulations, paper or cloth, list state documents in the body of the Index, under the name of the particular state.

For *exhaustive searching* on state documents, the following should be used:

Before 1910

Call
Number

79. Bowker, R. R. *State Publications: A Provisional List of the Official Publications of the Several States of the United States from Their Organization*. New York: Publishers' Weekly, 1899-1909. 4 v.
80. Hasse, A. R. *Index of Economic Material in Documents of the States of the United States to 1904*. Washington: Carnegie Institution, 1907-22.
Covers Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, New York, Delaware, Ohio, Kentucky, California, Illinois, Pennsylvania, New Jersey. Thirteen volumes. Work now stopped.
81. Reece, E. J. *State Documents for Libraries*. Urbana, Ill.: University of Illinois, 1915. 163 p.
82. United States. Library of Congress. *Account of Government Document Bibliography in the United States and Elsewhere*, by James B. Childs. Washington: Government Printing Office, 1930. 57 p.

Since 1910

83. United States. Library of Congress. Division of Documents. *Monthly Check-List of State Publications*. January, 1910 to date. Washington: Government Printing Office, 1910—. Full index issued at the end of each year.
See also the United States Library of Congress reference in preceding group.

4. *City documents.*

City documents are issued in great quantities and there are no general indexes or check lists covering them. If you need to use city documents and cannot go personally to the cities involved, Wyer (86:45-49, 54-55) will give you a good bird's-eye view of the field and cite the available lists and reference helps. The Special Libraries Association, 345 Hudson Street, New York City, has issued check lists of official publications of the larger cities of the United States and Canada, including latest editions of charters and ordinances. The latest check list in this series was issued in 1932 and covered the years from 1927 to that date. For later years, correspond with the Association.

III. HOW TO GET ACCESS TO THE DOCUMENTS
THEMSELVES1. *Federal documents.*

The one sure place for all federal documents is the Library of Congress at Washington. Most of them for the period since a depository library was founded, may be expected to be available in that library. Certain libraries are selected as depositories. The list of these may be secured from the Superintendent of Documents at Washington, and it also appears from time to time in various government publications, an example being List of Publications of the Department of Commerce, May 15, 1931, p. v ff. Depositories are the larger college and university libraries. The early documents are of course most likely to be found in the older university libraries. Every state has at least one depository, the state university being the most likely one. Every city public library will have some of the more important federal documents; the larger the library, the more likely it is to collect such documents.

2. *State documents.*

State documents may be found in such state institutions as the library, the historical society, the archives, or the university. They also may be kept by city libraries or by large college and private university libraries. Large libraries may have collections of documents from other states. The H. W. Wilson Company of New York in 1932 issued a chart showing the official agencies for the exchange or distribution of state documents. Any library interested in state documents is likely to have a copy of this chart or a subsequent edition.

3. *City and other local documents.*

The state library, historical association or archives, and the state university libraries are likely to have good collections of local documents in their own state. They often have documents that local governments with their frequent changes of officials have not kept or made accessible. In many cities, municipal documents are more likely to be kept accessible by the local public

library or historical society than by the city government. The information in both these places may be kept in scrapbooks. For example, a village treasurer's report may be printed in one local paper, while the report for the library will appear in another, but both reports may be gathered together into the same scrapbook by the local library or historical society.

To secure a copy of any government document for yourself, try the proper official. This usually takes time, but it is often the surest way for a document that is out of print or general circulation. Thus, try your senator or your congressman for a federal document; some state official for a state document; and some city official for a city document. In the case of state documents, either government or university, the state library or the university library may give or lend a copy if you can show enough need for it. In the case of federal documents it is often a great economy of time to pay the small purchase price for the document and get it promptly. In sending for an item send the exact title, number, etc., with cash or postal order to the Superintendent of Documents, Washington, D. C.

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For *significant practice* with government documents, use Number 12 of the Alexander Library Exercises. This will acquaint you with the various indexes and their use so that henceforth utilization of the vast resources in such documents will be comparatively easy for you.

IV. REFERENCES FOR FURTHER STUDY

For a very *recent treatment* see:

Call

Number

84. American Library Association. Committee on Public Documents. Public Documents, State, Municipal, Federal, and Foreign. Chicago: American Library Association, 1934. 233 p.

The value of the following references has been indicated in the text:

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Call
Number

85. Boyd, Anne Morris. United States Government Publications. New York: The H. W. Wilson Company, 1931. 329 p.
86. Wyer, James I. United States Government Documents. Chicago: American Library Association, 1933. 56 p.

For locating government documents of *foreign countries*, see Mudge (6:279-282).

For indexes to publications of various *departments of our federal government*, consult Mudge (6:275-278).

CHAPTER XIII

UNITED STATES OFFICE OF EDUCATION PUBLICATIONS

THE publications of the United States Office of Education are a gold mine for both the investigator and the practical schoolman. Sooner or later every phase of education is sure to be discussed, or subjected to research, in these publications. In them the basic educational statistics appear or are noted.

Such an excellent guide to these publications exists in the Witmer and Miller article reproduced as Section IV of this chapter that only a few additional notes are advisable here. The authors of that article have kindly granted permission for reprinting.

I. SCOUTING

For publications since January 1, 1929, the Education Index is fairly complete. Likely references to important publications issued within the last few weeks will appear in the Weekly List of Selected United States Government Publications, issued by the Superintendent of Documents at Washington. The annual price list of Educational Publications available, issued by the same official, while of course not complete, will be a ready means of looking up old publications. This price list is No. 31 and in recent years has been made up each December and printed soon afterwards. If you need still more materials, look up Section IV following to see if there is some special series covering your problem or topic, and also if there is a special index for the field.

II. EXHAUSTIVE SEARCHING

Before 1910

List of Publications of the United States Office of Education, 1867-1910. U. S. Bureau of Education, Bulletin, 1910, No. 3. See Section IV, page 133 of this chapter.

1910-1929

The Document Catalog (76) described in Chapter XII. See Section IV, page 133 of this present chapter.

1929 on

The Education Index (51) and the Monthly Catalog (77) which will be in time cumulated into the Document Catalog. See Chapter XII, Section II, 2, and pages 133-134 of this present chapter.

Special indexes covering respectively bulletins, reports of the Commissioner of Education, health education, home economics, parent education, rural education, and science, are described in Section IV following.

Changes in title of the Office or of its publications sometimes cause trouble to the searcher. For example, until October, 1929, the Office of Education was for many years titled the Bureau of Education. Changes are listed in Section IV following.

As the Office of Education is necessarily slow on publication, it is often advisable to visit the Office or write the proper staff member, to find out what *unpublished materials*, especially statistics, are available. For a list of staff members with titles showing their specialties, see the annual directory of the Office or any number of *School Life*, its official organ.

III. STATISTICS

The statistics of the United States Office of Education are the basic ones for all educational studies dealing with the country as a whole. It will be better, however, to take them up in Chapter XIX, which discusses all sources of educational statistics of importance to educators.

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For *valuable practice* with publications of the United States Office of Education, use Number 13 of the Alexander Library Exercises. If you do this exercise well, you will have easy access during your professional life to the great resources of the Office, many of which cannot be found elsewhere.

IV. CHECK LIST OF PUBLICATIONS OF THE UNITED STATES
OFFICE OF EDUCATION

This section is a reprint of an article whose authors have made it available here through their kindness and their desire to encourage educators to use the publications of the Office more widely. The present writer has brought it up to date with a few additional items, and has also added the part on Vocational Education from materials furnished by W. D. Boutwell, Editorial Chief, and Sabra W. Vought, Chief of Library Division in the Office.

U. S. OFFICE OF EDUCATION* SERIAL PUBLICATIONS†

A CHECK LIST WITH DESCRIPTIVE NOTES

By Eleanor M. Witmer and Margaret C. Miller

The government Office of Education at Washington was established in 1867 "for the purpose of collecting such statistics and facts as shall show the condition and progress of education in the several States and Territories, and of diffusing such information regarding the organization and management of schools and school systems, and methods of teaching, as shall aid the people of the United States in the establishment and maintenance of efficient school systems, and otherwise promote the cause of education throughout the country."¹ Ever since its establishment it has attempted to make known the findings of its research largely through its publications and conferences. In the former lies a wealth of statistics, facts, and source materials that are of primary importance to students of education. The following check list has been made as a guide to the various series of publications and brief notes descriptive of their contents. A list of the indexes most useful in searching for the information contained in these publications is appended.

Accredited Higher Institutions. Seven of these lists have been issued to date as Bulletins. See

Bulletin 1917, No. 17.	Bulletin 1929, No. 2.
Bulletin 1922, No. 30.	Bulletin 1930, No. 19.
Bulletin 1926, No. 10.	Bulletin 1930, No. 16.
Bulletin 1927, No. 31.	

* Called Office of Education, 1867-1870; renamed Bureau of Education, 1870-1929; name, Office of Education, restored 1929.

† Reprinted here by special permission of the authors, who first issued it in the Teachers College Record, Volume XXXIV, No. 4, January, 1933.

¹ 39th Congress, 2nd Session—1867 (14 Stat. L., p. 434).

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Accredited Secondary Schools in the United States. Eight of these lists have been issued to date as Bulletins. See

Bulletin 1913, No. 29.	Bulletin 1925, No. 11.
Bulletin 1915, No. 7.	Bulletin 1928, No. 26.
Bulletin 1916, No. 20.	Bulletin 1930, No. 24.
Bulletin 1922, No. 11.	Bulletin 1934, No. 17.

Annual Report of the Commissioner of Education, 1867 to date. Early volumes of this set contain bibliographies and reports on special phases of education in the United States and Europe; later ones give a résumé of the activities of the Bureau of Education and summarize briefly educational progress in the United States. From 1867 to 1889 the Annual Report appeared in one volume; from 1889 to 1917 it appeared in two volumes. Volume 2 contains the statistics. The following exceptions are to be noted: 1869, no report issued; 1915, volume 2 not issued. Statistics contained in volume 2 of the 1916 report are figures for 1915, and statistics found in volume 2 of the 1917 report properly belong to the 1916 report. After 1917 the statistics were transferred to the Biennial Survey of Education. This volume is described under its title.

Biennial Survey of Education, 1918 to date. Issued in chapter form in advance of the regular publication. This survey appears in bound form every two years. Each chapter summarizes the development in the field covered. Statistics cover general educational statistics, state and city school systems, private and denominational schools, universities, colleges, and teacher-training institutions.

Bulletins, 1906 to date. Issued at irregular intervals and numbered by the calendar year. These bulletins include discussions of new educational theories, school and university surveys, suggested changes in the curricula, and reports of professional statistics. Certain regular publications appear in the Bulletin series and are useful research aids. For example:

Biennial Survey of Education.

Record of Current Educational Publications. (Discontinued in 1932 and since carried on by a combination of the Elementary School Journal and the School Review.)

Research Studies in Education.

Educational Directory.

Accredited Secondary Schools and Higher Institutions.

Handbook of Educational Associations and Foundations.

These titles are described as they appear in alphabetical order. The Bulletins have been indexed in the Readers' Guide since 1906, and in the Education Index since 1929.

Careers. See Guidance Leaflets.

Circulars, 1930 to date. Mainly bibliographies, directories, and tests of various types in mimeographed form. Indexed in the Education Index. Two of the titles in this series are:

No. 1. Nursery Schools in the United States, 1929-1930. 1930.

No. 134. Home Economics Offerings in Institutions of Higher Education, 1932-1933. 1934.

Circulars of Information, 1867-1903. The first thirteen of these Circulars appeared as reprints from the department edition of the Annual Report. From 1875 until their discontinuance in 1903, they were renumbered for each year. They were lengthy monographs on pedagogical subjects, such as foreign systems of education, foreign institutions, state histories of education, college libraries, etc.

City School Leaflets, Nos. 1-31, 1922-1929. Problems of the city school are covered in this series. Practically all the bulletins are edited by the Chief of the City School Division. Some of the titles are:

No. 9. Teaching Load in 136 City High Schools. 1925.

No. 18. Samples of Teacher Self-Rating Scale. 1925.

No. 25. Length of School Day. 1927.

No. 21. Pay Status of Absent Teachers and Pay of Substitute Teachers. 1926.

No. 22. Cities Reporting the Use of Homogeneous Grouping and of the Winnetka Technique and Dalton Plan. 1926.

Commercial Education Leaflets, Nos. 1-10, 1922-1924. Material collected and edited by the commercial education specialist in the Bureau of Education. Such subjects as college entrance credits in commercial subjects, statistics relating to business education in colleges and universities, coördination of business preparation and placement, commercial education, and school opportunities and business needs have been included. The leaflets average from eight to ten pages.

Commissioner of Education. Annual Reports. See Annual Report of the Commissioner of Education.

Community Center Circulars, Nos. 1-3, 1918-1920. A short series dealing with the problems of community work.

Dollar Educational Packets. Each packet contained from five to eleven official education publications of unusual value to teachers and administrators. The service was available for several years around 1932 but is now discontinued.

Educational Directory, 1912 to date. An annual publication, issued now

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as No. 1 of the Bulletin series each year, published in four parts as rapidly as the data become available, and then as a whole. Part I, State and county school officers; Part II, City school officers; Part III, Colleges and universities, including all institutions of higher education; and Part IV, Educational associations and directories.

Federal Board for Vocational Education. See Vocational Education, page 136 following.

Foreign Education Leaflets, Nos. 1-3, 1923-1927.

No. 1. Education in the Irish Free State. 1925.

No. 2. Public Education in Estonia. 1926.

No. 3. Educational Progress in the Free City of Danzig. 1927.

Good References, 1931 to date. These are selected and annotated bibliographies of four or five pages on current educational problems. To date twenty-nine have been published, samples being:

No. 1. Teachers of Rural Schools: Status and Preparation. 1931.

No. 4. The Education of Women. 1931.

No. 23. Language Handicaps of Non-English Speaking Children. 1934.

No. 26. Small High Schools: Curriculum and Personnel Problems. 1934.

No. 29. The Curriculum and Social Change. 1934.

Guidance Leaflets. These leaflets made their first appearance in the Leaflet series in 1931, under the caption "Careers." Facts about the various professions have been collected. At the present time the following professions are represented: law, medicine, pharmacy, architecture, librarianship, dentistry, journalism, civil engineering, electrical engineering, mechanical engineering, music, veterinary medicine, nursing, forestry, chemistry and chemical engineering, art, home economics, optometry. The leaflets form valuable reference materials in vocational guidance work with young people in the senior high schools. Indexed in the Education Index.

Handbook of Educational Associations and Foundations, 1926. This handbook appeared as Bulletin 1926, No. 16. Arranges associations in alphabetical order under title and includes such information as date of establishment, purpose, publications, name and mailing address of the secretary. Numerous cross references are included so that it is possible to find readily any association even though one is not familiar with the exact name.

Health Education Series, Nos. 1-20, 1919-1927. Twenty bulletins, all emphasizing the health of the school child. The bulletins vary in length, but almost all contain good, short bibliographies. Some of the titles are:

- No. 2. Diet for the School Child. 1922.
- No. 7. The School Hour at Lunch. 1920.
- No. 10. Suggestions for a Program for Health Teaching in the Elementary Schools. 1921.
- No. 15. Suggestions for a Program for Health Teaching in the High School. 1923.
- No. 17. Helps for the Rural School Nurse. 1924.
- No. 18. What Every Teacher Should Know About the Physical Condition of Her Pupils. 1924.

Higher Education Circulars, Nos. 1-34, 1916-1928. This series covers problems of the colleges and universities. Such topics as institutional budgets, policies, and curricula of schools of education in state universities, and expenditures of state universities are included.

Home Economics Circulars, Nos. 1-19, 1917-1924. Many bibliographies, lists of books, and lists of courses of study are found in this series. The bulletins average from four to eight pages. The following titles are a sample of the type of material included:

- No. 9. Home Economics Courses of Study for Junior High Schools. 1920.
- No. 11. Equipment for Home Economics Departments. 1922.
- No. 18. Titles of Completed Research from Home Economics Departments in American Colleges and Universities, 1918-1923. 1924.
- No. 19. Sources of Useful Information for the Teacher of Home Economics. 1924.

Home Education Circulars, Nos. 1-8, 1915-1927. Parent education is the chief interest of the eight bulletins in this series.

Industrial Education Circulars, Nos. 1-28, 1919-1929. Many phases of industrial education have been incorporated in this series of circulars. Practically all are edited by the specialist in industrial education at the Bureau of Education. The circulars average from ten to twenty pages in length. A great deal of space has been given to the training and preparation of teachers of industrial arts. Most of the circulars contain good bibliographies.

Kindergarten Circulars, Nos. 1-18, 1911-1925. Reports on many phases of kindergarten and preschool education have been incorporated in this series. Many of the circulars include good, short bibliographies.

Leaflets, 1930 to date. These leaflets range in length from two to eight pages. Within the series has grown up a series of bulletins known as "Guidance Leaflets" (described under that title). Other issues include:

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No. 1. Sanitation of Schools. 1930.

No. 4. Education in Porto Rico, 1920-1930. 1931.

No. 40. Constitutional Basis of Public School Education. 1931.

No. 41. Report Cards for Kindergarten and Elementary Grades.
1931.

No. 44. The Deepening Crisis in Education. 1933.

No. 45. Federal Grants for Education, 1933-34. 1935.

Lessons in Community and National Life—Community Leaflets. These lessons appeared during 1918. They were prepared in three sections; namely: Section A, for the upper classes of the high school; Section B, for the upper grades of the elementary school and the first class of high school; Section C, for the intermediate grades of the elementary school.

Library Leaflets, Nos. 1-36, 1914-1929. Bibliographies on a wide range of educational subjects. All were prepared in the Library Division of the Bureau of Education and average about four to five pages in length.

Pamphlets, 1930 to date. Material from the rapidly changing fields of education is included in this series. The pamphlets average in length from eight to thirty-two pages. The material included is indexed in the Education Index. Some of the titles are:

No. 4. Home Economics for Boys. 1930.

No. 7. National Advisory Council on School Building Problems.
1930.

No. 8. An Age-Grade Study of 7,632 Elementary Pupils in Forty-Five Consolidated Schools. 1930.

No. 14. School Administration in State Educational Survey Reports. 1930.

No. 52. The Cost of Going to College. 1934.

No. 59. Legislation Concerning Free Textbooks. 1934.

No. 60. Doctors' Theses in Education. 1935.

Physical Education Series, Nos. 1-10, 1923-1929. Valuable material for the physical education teacher in both rural and urban centers. Some of the outstanding titles are:

No. 1. Preparation of School Grounds for Play Fields and Athletic Events. 1923.

No. 3. Suggestions for a Physical Education Program for Small Secondary Schools. 1923.

No. 6. The School as the People's Clubhouse. 1925.

No. 8. Games and Equipment for Small Rural Schools. 1927.

No. 9. Professional Training in Physical Education. 1928.

No. 10. Physical Education in City Public Schools. 1929.

Publications on Education. A price list of publications of the Office of Edu-

cation and such publications from other departments as pertain to education. Published annually, usually in June. Consult the latest available.

Record of Current Educational Publications, January, 1912-March, 1932.

From January, 1912, to July, 1929, this was a list of the educational material received at the Bureau of Education. From July, 1930 to March, 1932 it formed a list of the best articles and books as selected by specialists in thirteen branches of education. The selection is made from three hundred American educational publications. The first nine issues were published as Library Circulars, succeeding issues as Bulletins. After January, 1933, this service was continued by The Elementary School Journal and The School Review. The plan to be developed by both journals will be found in The Elementary School Journal, v. 33, p. 321-324, January, 1933.

Research Studies in Education, 1926 to date. A classified and annotated list of research studies in education for the years indicated. Includes material submitted for Master's and Doctor's theses, studies completed by research bureaus of state and city boards of education, and educational associations. Each issue contains an alphabetical list of institutions represented and an author and subject index. Four issues have been published as parts of the Bulletin series:

- Bulletin 1928, No. 22 (1926-1927 research).
- Bulletin 1929, No. 36 (1927-1928 research).
- Bulletin 1930, No. 23 (1928-1929 research).
- Bulletin 1931, No. 13 (1929-1930 research).
- Bulletin 1932, No. 16 (1930-1931 research).
- Bulletin 1933, No. 6 (1931-1932 research).
- Bulletin 1934, No. 7 (1932-1933 research).

Rural School Leaflets, Nos. 1-46, 1922-1931. Edited largely by county and state rural education agents. Such titles as the following will be found in the series:

- No. 29. Transportation Costs in Minnesota Consolidated Schools. 1924.
- No. 34. Some Practical Uses of Auditoriums in the Rural Schools of Montgomery County, Ala. 1924.
- No. 36. Publications of the U. S. Bureau of Education Pertaining to Rural Education. 1924.
- No. 46. Time Allotment in Selected Consolidated Schools. 1930.

School Health Studies, Nos. 1-15, 1927-1929. The administration and supervision of health work for both children and teachers is the chief concern of this series. The majority of the leaflets have been edited by either the National Child Health Council or the specialist in school hygiene at the

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Bureau of Education. The studies vary from two to fifty pages. Some titles are:

- No. 5. Health Promotion in Continuation Schools. 1924.
- No. 8. School Health Supervision. 1924.
- No. 9. Training of Dental Hygienists. 1925.
- No. 11. School Nurse Administration. 1925.
- No. 12. Health of the Teacher. 1926.

School Home-Garden Circular, Nos. 1-16, 1915-1917. Plans and suggestions for instruction and supervision of school supervised home gardens.

- No. 1. Instruction for School Supervised Home Gardens.
- No. 2. Course in Vegetable Gardening for Teachers.
- No. 8. Planting the Garden.
- No. 10. Suggested Schedule for Home-Garden Work in the South.

School Life, 1915 to date. (Publication suspended from January to June, 1922.) A monthly magazine carrying articles of timely interest on American educational questions. Besides its general articles, it has at present the following regular features: Schools Report; Measurement Today; C. C. C. Education; Educators' Bulletin Board (Meetings, Theses, New Books and Pamphlets); Vocational Summary; Electrifying Education; Education in the News; New Office of Education Publications; Education Bills Before Congress; New Government Aids for Teachers; Indian Education; Education Abroad; The Colleges. Indexed in the Readers' Guide since January, 1924 and in the Education Index since January, 1929.

Secondary School Circulars, Nos. 1-10, 1918-1921. Nine circulars issued:

- No. 1. Secondary School and the War. 1918.
- No. 2. Organization of High Schools in War Time. 1918.
- No. 3. Science Teaching in Secondary Schools in the War Emergency. 1918.
- No. 4. Industrial Arts in Secondary Schools in the War Emergency. 1918.
- No. 5. Reorganization of the First Course in Secondary School Mathematics. 1920.
- No. 6. Junior High School Mathematics. 1920.
- No. 7. Problems of Summer Teaching in Connection with Project Supervision. 1920.
- No. 8. The Function Concept in Secondary School Mathematics. 1921.
- No. 9. Not issued.
- No. 10. Method and Content of French Courses in Accredited High Schools of the South. 1921.

Statistical Circulars, Nos. 1-12, 1923-1929. Statistical studies, worked out by the Statistical Bureau of the Bureau of Education. The circulars average from two to four pages in length.

- No. 1. Per Capita Costs in City Schools. 1923.
- No. 2. Enrollment in Foreign Languages, Science, and Commercial Subjects in Public High Schools. 1923.
- No. 3. School Support and School Indebtedness in Cities. 1923.
- No. 4. Per Capita Costs in City Schools, 1923-1924. 1925.
- No. 5. Organization, Housing, and Staffing of State Departments of Education, 1923-1924. 1925.
- No. 6. Comparison of City and School Finances in 95 Cities. 1927.
- No. 7. Per Capita Costs in City Schools, 1925-1926. 1927.
- No. 9. Per Capita Costs in Teachers Colleges and State Normal Schools, 1925-1926. 1927.
- No. 10. Items of Statistics for Public School Systems. 1928.
- No. 11. Per Capita Costs in Teacher Training Institutions. 1929.
- No. 12. Per Capita Costs in City Schools, 1927-1928. 1929.

Teachers Leaflets, Nos. 1-17, 1917-1924. The teacher's professional problems are discussed in this series.

INDEXES AND SPECIAL LISTS OF PUBLICATIONS

GENERAL INDEXES TO PUBLICATIONS OF THE U. S. OFFICE OF EDUCATION

List of Publications of the U. S. Bureau of Education, 1867-1910. (U. S. Bureau of Education, Bulletin, No. 3, 1910.) Of all the early indexes to the publications of the Bureau of Education, this is perhaps the most useful. It includes a list of the annual statements made by the Commissioner of Education; the annual reports, with complete bibliographical data which include the various places in which the report appeared; a complete list of the Circulars of Information, issued by the Bureau from 1867 to 1903; a list of the Bulletins from 1867 to 1903; and, finally, a complete list of the miscellaneous publications issued from 1867 to 1910. Eighty-two publications appeared during this period and today many of them constitute important historical data in the field of education. The use of the list is facilitated by the inclusion of an author, a title, and a detailed subject index.

*Document Catalogue, Vols. 1-17, 1896-1925.*² U. S. Superintendent of Documents. Government Printing Office, Washington, D. C. This is a dictionary catalog in form, listing each publication under author (government body or personal name), subject, and sometimes title and giving full bibliographical data. It contains many analytics and cross references.

² Currently issued.

It is an excellent and extremely comprehensive index but unfortunately is slow in publication. It is useful in locating educational material for the period between 1910 and 1925. It may be supplemented by the Monthly Catalogue United States Public Documents listed below.

Monthly Catalogue United States Public Documents, 1895 to date. U. S. Superintendent of Documents. Government Printing Office, Washington, D. C. A complete list of all the printed publications issued by the government publishing bodies. It is arranged alphabetically by major departments and under each by the subordinate bureau, office, or division, etc., in alphabetical order. For each publication listed complete bibliographical data are given, including statement of price and where or how obtainable. An annual author and subject index, quite comprehensive in detail, is published in July of each year.

Education Index. 1929-1933.² Monthly except July and August. H. W. Wilson Company, New York.

Since 1929 all publications of the Office of Education received by H. W. Wilson Company have been indexed in the Education Index.

Readers' Guide to Periodical Literature. 1900-1933,² v. 1-9. Monthly, H. W. Wilson Company, New York.

Since 1900 the Bulletin of the Office of Education has been included in this index.

SPECIAL INDEXES AND RECENT SELECTIVE LISTS

Bulletins of the Bureau of Education from 1906 to 1927, with index by author, title, and subject. (U. S. Bureau of Education. Bulletin 1928, No. 17.) 1929. This is a complete list of all the Bulletins published by the Bureau of Education during the years indicated. It contains an excellent index whereby material may be located under author, title, or subject. For later Bulletins, consult the Monthly Catalogue United States Public Documents, 1927 to date.

Since 1906 all Bulletins have been indexed in the Readers' Guide.

Since 1929 all Bulletins have also been indexed in the Education Index.

Index to the Reports of the Commissioner of Education, 1867-1907. (U. S. Bureau of Education. Bulletin 1909, No. 7.) 1909. This is a comprehensive index to the Annual Reports of the Commissioner of Education under authors and subjects, with an analysis of the more important articles for the years 1867-1907, inclusive. From 1867-1868 to 1887-1888 the Reports were published annually in one volume. From 1888-1889 on, they have been issued in two volumes. Therefore this is an index to fifty-seven volumes.

² Currently issued.

U. S. Government Publications Useful in Health Education. (U. S. Office of Education. Circular No. 51.) 1932. From hundreds of government publications, thirty-four were selected for inclusion in this bulletin. They cover material useful in teaching health, in planning physical education activities, and in developing safety education.

U. S. Government Publications Useful to Teachers of Home Economics. (U. S. Office of Education. Circular No. 50.) 1932. The purpose of this bulletin is to inform teachers of home economics of material obtainable free or at small cost from various government bureaus on such subjects as child welfare, food and nutrition, clothing and textiles, family economics and home-making education.

U. S. Government Publications of Interest to Parents and Leaders in Parent Education. (U. S. Office of Education. Circular No. 54.) 1932. This bulletin represents an attempt to assemble current publications from government sources at present available which may serve as basic material for discussion groups, as guides for leaders of parent education, or as aids for program makers in parent-teacher associations.

Publications of the U. S. Bureau of Education Pertaining to Rural Education. (U. S. Bureau of Education. Rural School Leaflet No. 36.) 1924. This leaflet lists only publications of the Bureau of Education which have direct bearing upon rural school conditions and problems. It includes publications issued between January, 1908, and December, 1924. An excellent index under author, title, and subject is included.

U. S. Government Publications Useful to Teachers of Science. (U. S. Office of Education. Circular No. 48.) 1932. This list is divided into two parts, the first containing references most suitable for elementary grades, the second for secondary grades. Each part is further subdivided according to subject matter.

CHANGES OF TITLE AND PUBLICATIONS

U. S. OFFICE OF EDUCATION, 1867-1932

U. S. Office of Education, 1867-1869. Annual Report of the Commissioner of Education, 1867-1869. Circulars of Information.

U. S. Bureau of Education, 1870-1929. Annual Report of the Commissioner of Education, 1870-1929. Annual Statements of the Commissioner, 1887. Biennial Survey of Education, 1918-1929. Bulletins, 1906-1929. Circulars of Information, 1869-1903. City School Leaflets, Nos. 1-31, 1922-1929. Commercial Education Leaflets, Nos. 1-10, 1922-1924. Community Center Circulars, Nos. 1-3, 1918-1920. Foreign Education Leaflets, Nos. 1-3, 1923-1927. Health Education Series, Nos. 1-20, 1919-1927. Higher Education Circulars, Nos. 1-34, 1916-1928. Home Economics

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Circulars, Nos. 1-19, 1917-1924. Home Education Circulars, Nos. 1-8, 1915-1927. Industrial Education Circulars, Nos. 1-28, 1919-1929. Kindergarten Circulars, Nos. 1-18, 1911-1925. Lessons in Community and National Life, 1918. Library Leaflets, Nos. 1-36, 1914-1929. Physical Education Series, Nos. 1-10, 1923-1929. Record of Current Educational Publications, January, 1912-1929. Rural School Leaflets, Nos. 1-46, 1922-1931. School Health Studies, Nos. 1-15, 1927-1929. School Home-Garden Circular, Nos. 1-16, 1915-1917. School Life (periodical), 1915-1929. Secondary School Circulars, Nos. 1-10, 1918-1921. Statistical Circulars, Nos. 1-12, 1923-1929. Teachers Leaflets, Nos. 1-17, 1917-1924.

U. S. Office of Education, 1929 to date. Annual Report of the Commissioner of Education, 1929 to date. Biennial Survey of Education, 1929 to date. Bulletins, 1929 to date. Circulars, No. 1, 1930 to date. Dollar Educational Packets, No. 1, 1931 to date. Good References, No. 1, 1931 to date. Leaflets No. 1, 1930 to date. Pamphlets, No. 1, 1930 to date. Record of Current Educational Publications, 1929 to 1932. School Life (periodical), 1929 to date.

VOCATIONAL EDUCATION

The government publications in this field were issued by the Federal Board for Vocational Education from its organization in 1917 to 1933. On August 10, 1933, the functions of that board were transferred to the Department of the Interior, and on October 10, 1933, assigned by the Secretary of the Interior to the United States Office of Education. Since then the latter office has issued the corresponding publications. The series have comprised Annual Reports, Bulletins, Leaflets, and Monographs, the last three distributed among divisions such as Agriculture or Home Economics. Following are a few notes on the important series and topics of interest to workers in this area. Many of the publications are now out of print and available only in libraries or in the file copies of the Federal or State vocational education offices.

Annual Reports, 1917-1932. Many of these reports are now out of print. They contain general and specific information and statistical data with respect to developments in the fields of vocational education in agriculture, trade and industry, home economics, and commerce, as well as in the field of vocational rehabilitation, as compiled from reports submitted by State and Territorial boards for vocational education. Beginning with 1933, the annual vocational education and vocational rehabilitation report has been incorporated in brief form as part of the annual report of the Commissioner of Education, which is incorporated in the annual report to Congress of the Secretary of the Interior. In addition to this report, a Digest of Reports of State Boards for Vocational Education to the Federal Office, containing data covering enrollments, the

expenditures of Federal, State and local money, and vocational rehabilitation has been issued for the fiscal years 1933 and 1934, and will probably be issued annually in the future. For the single year of 1923, the Federal Board for Vocational Education issued a Yearbook, which was designed to provide a more adequate presentation of outstanding developments during the year in the fields of vocational education and rehabilitation.

Agricultural Education. Various bulletins, monographs, and leaflets from 1917 to date.

Bulletins, 1917-1933. These number 166 and deal with general fields and also with various phases of vocational education. Many of them are now out of print.

Commercial Education. Various bulletins from 1926 to 1930.

Employment Management. Several bulletins in 1919.

General Publications. Five numbers from 1917 to date.

Home Economics Education. Various bulletins from 1919 to date.

Leaflets, 1931-1932. These number three and deal with agricultural work with grains.

Miscellaneous Publications. These number more than twenty-five, 1917-1933, dealing with various subjects, a number of them being copies of pertinent Federal laws. They are usually only a few pages in length.

Monographs, 1925-1932. These number seventeen and deal with specific fields such as agriculture or programs within a given state. Many of them are now out of print.

Opportunity Monographs, 1918-19. Forty-four numbers including a few general ones. The remainder deal with various occupations from the metal trades through the professions to farm gardening. These are now out of print.

Rehabilitation Leaflets. These number twelve and are mostly for the purpose of encouraging those needing to be rehabilitated. They have such titles as "What Every Disabled Soldier and Sailor Should Know," or "Stick."

Rehabilitation Monographs, 1918-1919. Sixty-seven numbers, the first three being general. The remainder deal with various subjects and types of work from English- and non-English-speaking men to partnership business and professional accountants. These are now out of print.

Trade and Industrial Education. Various bulletins from 1918 to date.

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Vocational Rehabilitation. Various bulletins, monographs, and leaflets from 1921 to date.

For lists of all the publications, the following sources are available: The Office of Education has a hectographed list of the publications by titles, with dates from 1917 to 1933. Later publications may be found in a mimeographed list issued periodically by the United States Office of Education, the latest edition being Miscellaneous 229 Revised January 1935, or under the heading of Vocational Education in the latest edition of Price List Number 31 of the Superintendent of Documents at Washington. These last two sources give only documents now in print, but practically all the recent ones will be listed there. Since January 1, 1929, all publications have been listed in the Education Index under their respective subject headings.

V. REFERENCES FOR FURTHER READING

The references given at the end of Chapter XII include publications of the United States Office of Education, as the latter are government documents. In addition, these two references deal specifically with the Office.

Call
Number

87. Cooper, J. W. "The Office of Education." *Scientific Monthly*, 36 : 121-30, February, 1933.

A brief history of the U. S. Office of Education with notes on the organization of the office in 1933.

88. Smith, D. H. *The Bureau of Education—Its History, Activities, and Organization.* Institute of Government Research. Washington, Service Monographs of the U. S. Government, No. 14. Baltimore: Johns Hopkins University, 1923. 157 p.

The section on "Bibliography" by M. A. Matthews contains brief annotations on publications from 1863 to 1923, classified as to type of publication.

The following indexes have been described in Section IV preceding. For users of this chapter and the corresponding exercise, however, they need to be re-cited in the reference system of this book.

Call
Number

89. *Bulletins of the Bureau of Education from 1906 to 1927, with index by author, title and subject.* United States

Call
Number

- Bureau of Education, Bulletin 1928, No. 17. Washington, D. C.: Government Printing Office, 1929. 65 p.
90. Index to the Reports of the Commissioner of Education, 1876-1907. United States Bureau of Education, Bulletin 1909, No. 7. Washington, D. C.: Government Printing Office, 1909. 103 p.
91. United States Government Publications Useful in Health Education. United States Office of Education, Circular No. 51. Washington, D. C.: Government Printing Office, 1932. 4 p.
92. United States Government Publications Useful to Teachers of Home Economics. United States Office of Education, Circular No. 50. Washington, D. C.: Government Printing Office, 1932. 11 p.
93. United States Government Publications of Interest to Parents and Leaders in Parent Education. United States Office of Education, Circular No. 54. Washington, D. C.: Government Printing Office, 1932. 10 p.
94. Publications of the United States Bureau of Education Pertaining to Rural Education. United States Bureau of Education, Rural School Leaflet No. 36. Washington, D. C.: Government Printing Office, 1924. 23 p.
95. United States Government Publications Useful to Teachers of Science. United States Office of Education, Circular No. 48. Washington, D. C.: Government Printing Office, 1932. 20 p.

CHAPTER XIV

NATIONAL EDUCATION ASSOCIATION PUBLICATIONS

THE National Education Association is the most elaborate example of an educational association issuing publications highly useful to educators. Other important associations are the American Council on Education, National Society for the Study of Education, and American Association for Adult Education. For addresses, see the annual directory of the United States Office of Education (Chapter XIII). To locate their important publications, use the Education Index (51).

The publications of the National Education Association constitute another gold mine for the educational investigator and practical schoolman. Since 1857, every educational question of any material interest has been treated in these publications. Beginning with discussions, opinions, impressions, and the like, the treatments have more and more included factual material, researches, and citations from the best professional literature. From the very nature of the association, its publications embody considerable pleading of special cases and propaganda, otherwise it would not be fulfilling its true function. But if the reader will allow for this, he will find in the association's publications much exceedingly valuable material, in a more compact form and far earlier than he can secure it elsewhere. In the matter of educational statistics, for example, the association's research bulletins often present important figures eighteen months or two years before these appear in the publications of the government agencies collecting them. This, of course, is possible only through co-operation of the government agencies. The same bulletins also frequently contain statistics gathered by the association itself and not obtainable elsewhere.

I. GENERAL SUGGESTIONS FOR LOCATING PUBLICATIONS OF THE ASSOCIATION

The association's *publications* fall easily into *two main divisions*, those for the organization as a whole, and those for the individual departments, of which, including the National Council on Education, there are now twenty-four. A list of these departments begins in Section III of this chapter. A diagram of the organization of its divisions appears in Selle (98 : 37).

The *publications of the association as a whole* include the following: The annual volume of Proceedings covering the whole association and each department; the monthly Journal of the National Education Association; the research bulletins; reports of special committees which sometimes are printed as research bulletins, and sometimes in separate pamphlet form; a long list of various printed and mimeographed materials designed to aid teachers and school administrators in their school work—reading lists, bibliographies, summaries of professional and lay periodical articles and the like; a similar array for public relations purposes, particularly on educational legislation; and many small pieces of matter incidental to securing and keeping its great membership. At present the Joint Commission on the Emergency in Education is using all these forms of publications in one way or another.

The *departments vary greatly in publishing activity*. Some of them have only a small number of pages in the annual Proceedings volume. Others, notably the Department of Superintendence, issue bulletins, yearbooks, and numerous materials of their own. The other specially active departments in publishing at present are Elementary School Principals, American Educational Research Association, Classroom Teachers, Supervisors and Directors of Instruction, Secondary School Principals, and Deans of Women.

Since January 1, 1929, the matter of *indexing* the publications of the association and its departments is relatively simple. Beginning with that date, the Education Index (51) has tried to list every mimeographed or printed document of the association

that could reasonably be called a publication. These items are all listed under the main head, National Education Association. They are followed in order by the names of the committees, departments, divisions, and commissions, as subheads, with alphabetical classification.

Before 1929, there is no one place in which to locate all publications, and many were never indexed anywhere. The known indexing available for each kind of publication in those early years is given in the following pages in connection with the publication or department.

II. GENERAL PUBLICATIONS OF THE ASSOCIATION

1. *Proceedings*.

An annual volume since the first year, 1857. These proceedings cover the general sessions and also the departments separately. The 1906 volume serves as an index for all the volumes, 1857-1906. It contains a list of papers and discussions, classified chronologically by departments, with another classification by large subject headings. Each annual volume for years has had an index. The Proceedings have been indexed in the Readers' Guide from January 1, 1905 (went back to 1900), and in the Education Index beginning in 1929. The Readers' Guide does not index the individual articles in the Proceedings, only the departments included. The Education Index covers the articles as well.

2. *Journal of the National Education Association*.

This started as The Bulletin in 1913 (quarterly) and took its present name and monthly publication in 1921. It has been indexed in the Readers' Guide since January 1, 1923 and in the Education Index since January 1, 1929. Each volume has an index. Special features of this periodical at present include:

- a. A list of "Sixty Educational Books" for the previous year, published each spring.
- b. Stimulating articles on current problems.
- c. Suggestions for general reading and personal improvement.
- d. Notes and announcements on matters of professional interest.

- e. Suggestions for group study and faculty meetings.
- f. Notes on educational legislation.
- g. Material for public relations.

3. *Research Bulletin.*

This series is exceedingly valuable because it contains the most recent statistical material and data on current problems. The old issues are also valuable because they single out significant statistics from great masses of government reports. Two bulletins were issued in 1922, but the series started formally with Volume I in 1923. Each volume has an index. The bulletins have been indexed in the Public Affairs Information Service (59) from 1923 to date and in the Education Index, beginning with 1929, in both indexes classified by subject. Public Affairs Information Service does not list the bulletins by author. The Education Index uses the National Education Association with a subheading of Research Division for author. Very recent bulletins are more likely to be found under the subject heading than under the author heading.

The Research Bulletin *must be sharply distinguished from the* Review of Educational Research. The Research Bulletin is issued by the Research Division of the headquarters staff of the whole National Education Association. The Review of Educational Research is published by the American Educational Research Association, a department of the National Education Association. See Section III following.

The *Research Bulletin to date* has had these numbers:

- Facts on the Cost of Public Education and What They Mean. (Bulletin One, 1922).
- Facts for American Education Week. 40 p. (No number, 1922).
- Facts on State Educational Needs. Vol. I:1-64. (No. 1, 1923).
- No name, but treats costs and salaries. Vol. I:65-136. (No. 2, 1923).
- Teachers' Salaries and Salary Trends in 1923. Vol. I:137-252 (No. 3, 1923).
- Five Questions for American Education Week. Vol. I:253-308. (No. 4, 1923).
- Facts on the Public School Curriculum. Vol. I:309-356. (No. 5, 1923).
- Current Facts on City School Costs. Vol. II:1-64. (Nos. 1 and 2, 1924).
- Teachers' Retirement Allowances. Vol. II:65-96. (No. 3, 1924).
- Facts on the Public School for American Education Week. Vol. II:97-136. (No. 4, 1924).

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- The Problems of Teacher Tenure. Vol. II:137-176. (No. 5, 1924).
 Public School Salaries in 1924. Vol. III:1-72. (Nos. 1 and 2, 1925).
 Taking Stock of the Schools. Vol. III:73-104. (No. 3, 1925).
 Keeping Pace with the Advancing Curriculum. Vol. III:105-200. (Nos. 4 and 5, 1925).
 The Ability of the States to Support Education. Vol. IV:1-90. (Nos. 1 and 2, 1926).
 Efficient Teaching and Retirement Legislation. Vol. IV:91-162. (No. 3, 1926).
 A Handbook of Major Educational Issues. Vol. IV:163-234. (No. 4, 1926).
 Major Issues in School Finance. Part I. Vol. IV:235-265. (No. 5, 1926).
 Major Issues in School Finance. Part II. Vol. V:1-64. (No. 1, 1927).
 Salaries in City School Systems, 1926-27. Vol. V:65-128. (No. 2, 1927).
 The Scheduling of Teachers' Salaries. Vol. V:129-192. (No. 3, 1927).
 The Advance of the American School System. Vol. V:193-224. (No. 4, 1927).
 School Records and Reports. Vol. V:225-352. (No. 5, 1927).
 Creating a Curriculum for Adolescent Youth. Vol. VI:1-80. (No. 1, 1928).
 The Principal Studies His Job. Vol. VI:81-148. (No. 2, 1928).
 The Advance of the Teacher Retirement Movement. Vol. VI:149-204. (No. 3, 1928).
 Practices Affecting Teacher Personnel. Vol. VI:205-256. (No. 4, 1928).
 Can the Nation Afford to Educate Its Children? Vol. VI:257-292. (No. 5, 1928).
 Can the States Afford to Educate Their Children? Vol. VII:1-44. (No. 1, 1929).
 The Principal and Progressive Movements in Education. Vol. VII:45-104. (No. 2, 1929).
 Salary Scales in City School Systems. Vol. VII:105-172. (No. 3, 1929).
 Vitalizing the High School Curriculum. Vol. VII:173-276. (No. 4, 1929).
 The Principal as a Supervisor. Vol. VII:277-348. (No. 5, 1929).
 The Questionnaire. Vol. VIII:1-52. (No. 1, 1930).
 A Self-Survey Plan for State School Systems. Part I: Checklists. Vol. VIII:53-88. (No. 2, 1930).
 A Self-Survey Plan for State School Systems. Part II: Handbook. Vol. VIII:89-164. (No. 3, 1930).
 Investing in Public Education. Vol. VIII:165-220. (No. 4, 1930).
 Current Issues in Teaching Retirement. Vol. VIII:221-286. (No. 5, 1930).
 Ethics in the Teaching Profession. Vol. IX:1-92. (No. 1, 1931).
 The Principal at Work on His Problems. Vol. IX:93-160. (No. 2, 1931).
 Salaries in City School Systems, 1930-1931. Vol. IX:161-228. (No. 3, 1931).
 The Outlook for Rural Education. Vol. IX:229-304. (No. 4, 1931).
 Teacher Demand and Supply. Vol. IX:305-408. (No. 5, 1931).

- Administrative Practices Affecting Classroom Teachers. Part I: The Selection and Appointment of Teachers. Vol. X:1-32. (No. 1, 1932).
- Administrative Practices Affecting Classroom Teachers. Part II: The Retention, Promotion, and Improvement of Teachers. Vol. X:33-76. (No. 2, 1932).
- Estimating State School Efficiency. Vol. X:77-132. (No. 3, 1932).
- Crime Prevention Through Education. Vol. X:133-202. (No. 4, 1932).
- Facts on School Costs. Vol. X:203-226. (No. 5, 1932).
- The School Board Member. Vol. XI:1-42. (No. 1, 1933).
- Salaries in City School Systems, 1932-1933. Vol. XI:43-56. (No. 2, 1933).
- Constructive Economy in Education. Vol. XI:57-92. (No. 3, 1933).
- Current Conditions in the Nation's Schools. Vol. XI:93-114. (No. 4, 1935).
- Five Years of State School Revenue Legislation, 1929-1933. Vol. XII:1-38. (No. 1, 1934).
- Education for Character. Part I: The Social and Psychological Background. Vol. XII:43-80. (No. 2, 1934).
- Education for Character. Part II: Improving the School Program. Vol. XII:83-142. (No. 3, 1934).
- National Deliberative Committees in Education. Vol. XII:147-238. (No. 4, 1934).
- Modern Social and Educational Trends. Vol. XII:243-288. (No. 5, 1934).
- The Nation's School Building Needs. Vol. XIII:1-36. (No. 1, 1935).
- Salaries of School Employees, 1934-35. Vol. XIII:1-32. (No. 2, 1935).
- Progressive Practices in Socio-Civic Education. Scheduled for Vol. XIII (No. 3, 1935).
- Costs and Standards of Living in the Teacher Profession. Scheduled for Vol. XIII (No. 4, 1935).
- Progressive Practices in the Teaching of Reading. Scheduled for Vol. XIII (No. 5, 1935).
- Scheduling of Teachers' Salaries. Scheduled for Vol. XIV (No. 1, 1936).

4. *Other publications.*

These include the remaining kinds of materials described in Section I preceding. Other specific examples are the materials sent superintendents by their department, the annual packages for commencement and Education Week, and the December, 1934 package commemorating three hundred years of secondary education. This miscellaneous material is indexed in the Education Index, beginning January 1, 1929, under the main heading of National Education Association, with subheads. Before that date, the most important items are likely to be noted in the United States Catalog (45-46), the Readers' Guide (60), or the Inter-

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national Index (54). For the other materials, you would have to go to the Association's headquarters in Washington or use the annual Proceedings of the Association. Each section in the Proceedings is likely to mention the pertinent publications of the preceding and current years.

III. DEPARTMENT PUBLICATIONS

In recent years each annual volume of the Proceedings of the whole Association has, preceding the *proceedings for each department*, a historical note. This note cites by volume and page, the proceedings for all the years since the department was organized.

National Council of Education. Proceedings, 1880—

Administrative Women in Education. Proceedings, 1933—

Grew out of an organization started in 1915.

Adult Education. Proceedings, 1921—

Publishes the bi-monthly, *Adult Education*.

Art Education. Proceedings, 1933—

Business Education. Proceedings, 1892—

Grew out of an organization started in 1878.

Classroom Teachers. Proceedings, 1914—

Has published the News Bulletin of the Department of Classroom Teachers since 1928, and yearbooks as follows:

First Yearbook, 1926. No central topic. 85 p.

Second Yearbook, 1927. *The Child and His Teacher*. 248 p.

Third Yearbook, 1928. *Problems and Opportunities in Teaching*, 112 p.

Fourth Yearbook, 1929. *Creative Teaching and Professional Progress*. 227 p.

Fifth Yearbook, 1930. *Teaching as a Creative Art*. 307 p.

Sixth Yearbook, 1931. *The Economic Welfare of Teachers*. 244 p.

Seventh Yearbook, 1932. *The Classroom Teacher and Character Education*. 272 p.

Eighth Yearbook, 1934. *Teacher and Public*. 240 p.

Ninth Yearbook, 1936. *Physical and Mental Health of the Teacher*. About 300 p.

Beginning with the third yearbook, these have been noted by the United States Catalog (45) and its Cumulative Book Index supplement (46),

and in the Education Index (51) beginning with 1929. Beginning in 1932, the yearbook has become biennial, issued in even-numbered years.

Deans of Women. Proceedings, 1918—

Grew out of the earlier National Association of Deans of Women. Has published yearbooks, 1923—.

Educational Research. Proceedings, 1931—

The full title is American Educational Research Association which grew out of an earlier organization called the Directors of Educational Research. The group founded the Journal of Educational Research in 1920 and used it as an official organ until 1928. The annual volumes of this are indexed. It was indexed in Public Affairs Information Service (59) until 1932, in the International Index (54) from January 1, 1921 through 1928, and in the Education Index (51) from the beginning of 1929 to date.

For the distinction between this department and the Research Division of the Headquarters Staff, which are often confused by beginners, see Section II preceding.

In 1931, this department began publishing the Review of Educational Research five times a year. Each number is devoted to one of fifteen topics in a three-year cycle. The first number reviewed the researches and listed them to its date. Each succeeding corresponding number is to cover only the three intervening years. Each number has on the cover references to previous numbers covering the same or allied fields. The Review is indexed in the Education Index. The numbers to date, titles sometimes being slightly changed in the succeeding cycles of a topic, are:

The Curriculum. Vol. I : 1-64 (No. 1, 1931). Vol. IV : 121-252 (No. 2, 1934).

Teacher Personnel. Vol. I : 65-160 (No. 2, 1931). Vol. IV : 253-352 (No. 3, 1934).

School Organization. Vol. I : 161-244 (No. 3, 1931). Vol. IV : 353-444 (No. 4, 1934).

Special Methods in the Elementary School. Vol. I : 245-324 (No. 4, 1931). Vol. V : 1-120 (No. 1, 1935).

Psychology of the School Subjects. Vol. I : 325-450 (No. 5, 1931). Vol. IV : 445-563 (No. 5, 1934). Vol. V : 1-120 (No. 1, 1935).

Special Methods on High School Level. Vol. II : 1-94 (No. 1, 1932). Vol. IV : 445-563 (No. 5, 1934).

Finance and Business Administration. Vol. II : 95-182 (No. 2, 1932). Scheduled for Vol. V, No. 2, 1935.

Tests of Personality and Character. Vol. II : 183-270 (No. 3, 1932).

Tests of Intelligence and Aptitude. Vol. II : 271-342 (No. 4, 1932). Scheduled for Vol. V, No. 3, 1935.

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School Buildings, Grounds, Equipment, Apparatus and Supplies. Vol. II : 343-441 (No. 5, 1932). Scheduled for Vol. V, No. 4, 1935.

Educational Tests and Their Uses. Vol. III : 1-80 (No. 1, 1933). Scheduled for Vol. V, No. 5, 1935.

Mental and Physical Development of Children. Vol. III : 81-182 (No. 2, 1933). Scheduled for Vol. VI, No. 1, 1936.

Pupil Personnel, Guidance and Counseling. Vol. III : 183-278 (No. 3, 1933). Scheduled for Vol. VI, No. 2, 1936.

Psychology of Learning, General Methods of Teaching, and Supervision. Vol. III : 279-368 (No. 4, 1933). Scheduled for Vol. VI, No. 3, 1936.

The Legal Basis of Education. Vol. III : 369-482 (No. 5, 1933).

Methods and Technics of Educational Research. Vol. IV : 1-119 (No. 1, 1934).

History and Comparative Education. Scheduled for Vol. VI, No. 4, 1936.

Elementary School Principals. Proceedings, 1921—

Has published the Bulletin of the Department of Elementary School Principals since 1921. This is a quarterly, with the April number constituting a yearbook with an index and list of members. Name changed to National Elementary Principal with the October 1932 number (Vol. XII, No. 2). The Bulletin was not indexed until the Education Index (51) started in 1929. The yearbooks, however, have been listed in the United States Catalog (45) since 1923. Since 1928 they have been listed in the Education Index. The Yearbooks so far issued and projected are:

First Yearbook, 1922. The Technique of Supervision by the Elementary School Principal.

Second Yearbook, 1923. The Problem of the Elementary School Principal in the Light of the Testing Movement.

Third Yearbook, 1924. The Status and Professional Activities of the Elementary School Principal.

Fourth Yearbook, 1925. The Elementary School Principalship, A Study of Its Instructional and Administrative Aspects.

Fifth Yearbook, 1926. Studies in the Elementary School Principalship.

Sixth Yearbook, 1927. Projects in Supervision.

Seventh Yearbook, 1928. The Elementary School Principalship (Report of the Committee on Standards and Training).

Eighth Yearbook, 1929. Activities of the Principal.

Ninth Yearbook, 1930. The Principal and Administration.

Tenth Yearbook, 1931. The Principal and Supervision.

Eleventh Yearbook, 1932. The Principal and His Community.

Twelfth Yearbook, 1933. Elementary School Libraries.

Thirteenth Yearbook, 1934. Aids to Teaching in the Elementary School.

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Fourteenth Yearbook, 1935. Extracurriculum Activities. Integrating Activities in Elementary School Life.

Lip Reading. Proceedings, 1926—

Kindergarten Education. Proceedings, 1884—
Grew out of an earlier organization.

Music Education. Proceedings, 1884-1927, 1934—
Discontinued 1928 through 1933.

Rural Education. Proceedings, 1907—
Published the Journal of Rural Education from 1921 to 1926, listed by the International Index throughout (54). Has issued the Bulletin of the Department of Rural Education at intervals since 1930, covered by the Education Index (51).

School Health and Physical Education. Proceedings, 1893—

Science Instruction. Proceedings, 1894—

Secondary Education. Proceedings, 1887-1924, 1932—

Secondary School Principals. Proceedings, 1887—
Has published the Bulletin of the Department of Secondary School Principals and yearbooks, 1917—. No indexing before 1929 has been found. Then the Education Index (51) began covering all and the Cumulative Book Index (47) has listed some of the bulletins since 1928.

Social Studies. Proceedings, 1926—
Has as its official organ, The Historical Outlook, indexed in the International Index (54) up to 1929 and in the Education Index (51) since. Yearbooks, 1931— indexed in the United States Catalog (45) beginning with 1926 and in the Education Index from January 1, 1929, under the heading, National Council for Social Studies, as well as a departmental heading under National Education Association.

Superintendence. Proceedings, 1873—
This department grew out of an earlier organization. For many years the proceedings have been published separately and then again in the volume for the whole association. For some years the separate proceedings have appeared in the remarkable time of about April 1, for the meeting the last week in February preceding. These have been indexed in the United States Catalog (45) beginning in 1926, and in the Education Index (51) starting in 1929.

The department maintains an extensive research service for school boards at a flat charge of \$25 a year. This furnishes school boards with up-to-date statistics and comparative data on problems of current interest,

copies of research bulletins, and many special tabulations. Many of the data later appear in the research bulletins and other forms, but subscribers to the research service receive them months ahead. All this material is listed in the Education Index under the heading of National Education Association, with the sub-heads of Department of Superintendence, and Research Division.

Yearbooks were started in 1923. The United States Catalog has covered these beginning with 1924 and the Education Index with 1929.

First Yearbook, 1923. The Status of the Superintendent.

Second Yearbook, 1924. The Elementary School Curriculum.

Third Yearbook, 1925. Research in Constructing the Elementary School Curriculum.

Fourth Yearbook, 1926. The Nation at Work on the Curriculum.

Fifth Yearbook, 1927. The Junior High School Curriculum.

Sixth Yearbook, 1928. The Development of the High School Curriculum.

Seventh Yearbook, 1929. The Articulation of the Units of American Education.

Eighth Yearbook, 1930. The Superintendent Surveys Supervision.

Ninth Yearbook, 1931. Five Unifying Factors in Education.

Tenth Yearbook, 1932. Character Education.

Eleventh Yearbook, 1933. Recruitment of Educational Leadership.

Twelfth Yearbook, 1934. Critical Problems in School Administration.

Thirteenth Yearbook, 1935. Social Change and Education.

Fourteenth Yearbook, 1936. Social Studies Curriculum. (In preparation. Write-up in Journal of Educational Research 27:635, April, 1934).

Supervisors and Directors of Instruction. Proceedings, 1928—

Publishes Educational Method which is indexed in the Education Index, as are also the yearbooks. The latter to date are:

First Yearbook, 1928. Educational Supervision. A Report of Current Views and Practices. 270 p.

Second Yearbook, 1929. Scientific Method in Supervision. 307 p.

Third Yearbook, 1930. Current Problems of Supervisors. 252 p.

Fourth Yearbook, 1931. Evaluation of Supervision. 181 p.

Fifth Yearbook, 1932. Supervision and the Creative Teacher. 348 p.

Sixth Yearbook, 1933. Effective Instructional Leadership. 183 p.

Seventh Yearbook, 1934. Scientific Method in Supervisory Programs. 194 p.

Eighth Yearbook, 1935. Materials of Instruction. In press.

Supervisors and Teachers of Home Economics. Proceedings, 1931—

Grew out of an earlier organization.

Teachers Colleges. Proceedings, 1870—

Originally known as the Normal School Department, the full name now is the American Association of Teachers Colleges.

It has published the A. A. T. C. Quarterly, beginning with 1931, covered by the Education Index (51).

It has had yearbooks starting with 1922. Beginning with 1929 these are covered by the Education Index. No earlier indexing has been discovered.

Visual Instruction. Proceedings, 1923—

Starting in December of 1930, the department has issued the Bulletin of the Department of Visual Education, covered by the Education Index.

Vocational Education. Proceedings, 1875—

World Federation of Educational Associations. Proceedings, 1921—

IV. REFERENCES FOR FURTHER READING

Call
Number

96. How the N. E. A. Works. Journal of the National Education Association, 22 : 223, November, 1933.
One-page bird's-eye view with brief text and three diagrams.
97. National Education Association. Teachers' Professional Organizations. A Syllabus for College Classes or Other Study Groups. Washington, D. C.: The Association, 1932. 26 p.
Important facts concerning the association, pp. 6-16.
Publications of the departments, pp. 21-23.
98. Selle, E. S. The Organization of the National Education Association. Teachers College Contributions to Education No. 513. New York: Bureau of Publications, Teachers College, Columbia University, 1932. 180 p.
A thorough study of the history, composition, organization, and activities of the association up to date of study. Publications discussed on pages 98-110.

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For *practice* in utilizing the materials in the publications of the National Education Association, use Number 14 of the Alexander Library Exercises.

CHAPTER XV

BORROWING FROM OTHER LIBRARIES

ON MANY educational problems, especially researches, the searcher will discover promising documents listed but not possessed by the library he uses regularly. However, he has great borrowing possibilities if he knows how to secure "interlibrary loans." In *this borrowing by one library from another library*, the borrower must proceed through his local library. A distant library will not lend to him as an individual without direct claim on it as a regular constituent—student, faculty member, alumnus, etc. He may be regarded as a constituent of his state library which may make direct loans to teachers and other government employees. For regulations governing this latter service, write the reference librarian of the library concerned.

For all except experienced library borrowers or trained librarians, *securing interlibrary loans* is much like securing competent medical or surgical service. In the case of illness, one ought to know about what can be reasonably expected in the way of relief, where to go for hospitalization, what the fees will be, and the like. He also needs to know how and where to find competent medical men. Then he needs to see them and follow their advice. In similar fashion a borrower needs to know about what he can expect in library loans, where the needed documents are and under what conditions he may borrow them. The person for him to consult is the reference librarian in the library he is using. He should consult the reference librarian, follow her advice, and let her handle his case for him.

I. GENERAL CONDITIONS COVERING INTERLIBRARY LOANS

The general conditions governing interlibrary loans are best given in two sets of rules, the first the rule for all libraries as

laid down by the American Library Association, and the second the rule of the Library of Congress.

CODE OF PRACTICE FOR INTERLIBRARY LOANS OF THE
AMERICAN LIBRARY ASSOCIATION, 1917

(First six sections as quoted by Winchell, p. 14-15, in reference at end of this chapter.)

1. *Purpose.*

The purpose of interlibrary loans is (*a*) to aid research calculated to advance the boundaries of knowledge, by the loan of unusual books not readily accessible elsewhere, (*b*) to augment the supply of the average book to the average reader; subject, in both cases, to making due provision for the rights and convenience of the immediate constituents of the lending library, and for safeguarding the material which is desired as a loan.¹

2. *Scope or extent.*

Almost any material possessed by a library, unless it has been acquired on terms which entirely preclude its loan, may be lent upon occasion to another library; and it may be assumed that all libraries are prepared to go as far as they reasonably can, or as their regulations permit, in lending to others. Still, the lender alone must decide, in each case, whether a particular loan should, or should not, be made.

When applying for a loan, if a photographic reproduction would be a satisfactory substitute, librarians should always state the fact. Reproductions can frequently be obtained at small cost and have an advantage over an actual loan, in that they become the property of the borrower.

3. *Material which should not be applied for.*

Current fiction; any book requested for a trivial purpose, or which is available in other libraries more readily accessible to the applicant; also, if applying to a public library, current publications that can be readily purchased and for which there is a natural demand in a public library.

4. *Material which should be lent only under exceptional circumstances.*

Material in constant use or request in the library applied to; books of reference; books that are not to be taken from the library applied to except under special permission; material which by reason of its size or character

¹ The graduate student who has a thesis to prepare stands midway between these two extremes. It is often taken for granted that the needs of a graduate student should be met as a matter of course. But it would seem at least equally reasonable that the graduate student should choose his subject of study largely according to the means he has at hand. Not that he should be prevented from making use of an occasional interlibrary loan, but that his choice of a subject ought not to be such as to involve securing a large part of his material from a distant library. (*Footnote in Code.*)

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requires expensive packing, or high insurance; material which by reason of age, delicate texture, or fragile condition, is likely to suffer from being sent by mail or express.

5. *Music.*

Music is lent on the same conditions as books, but, if copyrighted, must not be used for public performances, except as permission for such be secured from the copyright proprietor.

6. *How effected.*

By libraries of standing, which will apply to others expected to possess the desired material, *in order of their relative distance from, or relative duty to*, the community in which any particular requests originate; the nearest library, whether in respect of distance, or of duty, to be approached first.

Applications for loans should give the author's full name, or at least, surname *correctly spelled*, with initials; title, accurately stated; date; publisher, or place of publication; edition, if a particular edition is needed. Applications should be typed or written legibly, preferably on a card of standard size.

LIBRARY OF CONGRESS INTERLOANS

(Copy of memorandum issued by the Librarian, November 1, 1931)

Under the system of interlibrary loans the Library of Congress will lend certain books to other libraries for the use of investigators engaged in serious research. The loan will rest on the theory of a special service to scholarship which is not within the power or the duty of the local library to render. Its purpose is to aid research calculated to advance the boundaries of knowledge, by the loan of *unusual* books not readily accessible elsewhere.

The material lent can not include, therefore:

a. Books that should be in a local library, or that can be borrowed from a library (such as a State library), having a particular duty to the community from which the application comes.

b. Books that are in print and procurable through ordinary trade channels.

c. Books for the general reader, mere textbooks, or popular manuals.

d. Books where the purpose is the pursuit of ordinary student or study club work.

e. Books in constant use in Washington, the loan of which would be an inconvenience to Congress, or to the Executive Departments of the Government, or to reference readers in the Library of Congress. These conditions would, except in certain special instances, exclude from this loan system late Government documents, domestic and foreign; Congressional hearings, which, if lost, are practically irreplaceable; genealogies; local his-

tories; newspapers and periodicals. A photostat copy is procurable at a relatively small charge if the article desired is not very long.

f. Books in the Rare Book Collection in certain special instances.

g. Volumes whose bindings would be unduly endangered by transportation.

Material which by reasons of its size or its character requires expensive packing or high insurance can be sent only in exceptional cases.

Music (except manuscripts, first editions, rare volumes, or in sheet form) is lent on the same conditions as books. Musical scores so lent, however, can not be used for public performances.

Loans to colleges and universities are customarily limited to books required by members of the teaching force in their own investigations.

A library in borrowing a book is understood to hold itself responsible for the safekeeping and return of the book at the expiration of 10 days from its receipt. An extension of the loan for a like period is granted, upon request, whenever feasible. The borrowing library is expected to apply to the material borrowed the same safeguards that it would apply to material of its own, requiring to be used only on its premises that which it would not itself lend for use outside. The borrowing library is also expected, in cases of loss or damage, to attend to the details of making replacements.

All expenses of carriage are to be met by the borrowing library.

Books will be forwarded by express (charges collect).

The Library of Congress has no fund from which charges of carriage can be prepaid.

General observations: Subject to the limitations indicated above, the Library of Congress welcomes applications for loans coming properly within the intent and purpose of the system. It must emphasize, however, that its ability to deal promptly and effectively with such requests will often depend upon the clearness and definiteness of the applications. Those requiring research to identify the material needed or to select items responsive to the need must yield precedence to specific requests for particular works.

The interlibrary loan system is intended merely to complement the resources of the local library, but not to supply the major part of the material needed for any extended research. When a particular investigation involves the examination of a large group of books, the loan system should not be expected to meet the need.

Library of Congress Research Service

Just as this book was going to press, word was received of a new service by the Library of Congress to cover "magazines, newspapers, and books of all types and of all periods in the history of the country." The circular concluded thus:

... to be of assistance to students working on theses and to all researchers, a service is now available by which material and data can be assembled by an experienced librarian and sent to students anywhere in the country for very small charges. Also photostatic copies of material may be made.

For particulars regarding this service anyone may write to me at the Library of Congress.

Very truly yours,

(S) LAURENCE E. TOMLINSON, B.A.

II. WHAT THE INDIVIDUAL BORROWER SHOULD DO

The following steps in the order named will bring the speediest results:

1. Make sure that the request comes clearly within the scope of interlibrary loans as shown in Section I preceding.

2. Be sure that you *copy in full* all the bibliographic data in the place you found the reference, making note of that place in case you have to use it again for checking.

All the items there may be important later. For example, a master's thesis in manuscript from the University of Michigan must be borrowed from the library of that institution, for it is most unlikely that any other library will have a copy. If either the "ms" or the "University of Michigan" item is omitted, there is little likelihood that anyone will be able to locate the document speedily except by accident.

3. Be sure that the document desired is not in the local library.

4. Verify and complete the reference to include all of the items given in Section 6 of the A. L. A. Code given in Section I of this chapter.

This can be done for modern American books by using the United States Catalog, its supplements, and the Cumulative Book Index (45-47).

For older books, see Mudge (6 : 284-309) and Winchell (99), but you will probably have to get a librarian to help you.

If you know the name of the author and have access to the author catalog of the Library of Congress, this is the quickest way. It cannot be employed, however, unless the name of the author is known. In case of joint authorship, this catalog lists only under the name of the first author as given on the book.

Some large libraries have duplicates of this author catalog, the Columbia University copy being in Room 325 South Hall.

If the reference is a periodical one, the proper periodical index, and for the proper date, should be used for verification and completion of the reference.

5. Do what you can in the local library to find out which libraries are likely to have copies of the document desired.

Let your local library conduct all correspondence with other libraries.

The Winchell reference (99), through its index, may enable you to get the names of *catalogs likely to show where copies are*. Any lending library is practically certain to have the Winchell reference and most good libraries will have many of the catalogs. If you should happen to be in Washington, the Great Union Catalog at the Library of Congress will afford the best help on this. If not, your library may have part of this Union Catalog. At Columbia University, for example, the main library (South Hall) does have a part in its card catalog room, which can be used to discover where the book may be.

For *theses and dissertations in education*, the United States Office of Education is building up a considerable collection specifically for loan purposes. The attempt is to have every graduate candidate or every institution deposit a copy of every graduate thesis or dissertation, on an educational subject, in this collection, which in March 1935 numbered 1,677 items. The only published list at date of this writing is that of 1931 (100). However, the Office will issue as Pamphlet 60 in 1935, a list of 797 dissertations deposited there and available for loan. This will list all dissertations, printed or in manuscript, deposited with the Office between August 1930 and September 15, 1934, alphabetically by author, subject, and institution. It is planned to issue annual supplements showing dissertations received within the period covered. For items received during a year, and for masters' theses since 1930, the only other resource is the List of Theses Received department in all issues of *School Life*. This involves tedious work, but until Reference (100) is brought up to date there is no other way to get the list of later theses, except on doctoral

dissertations. Note that these lists cover only items available for loan. They are *not* lists of all theses and dissertations issued in the country.

While *periodicals* in bound form are seldom lent, you may be able in emergencies to borrow duplicate volumes. The Union List of Serials and supplements (101) will show which libraries have the volumes you need.

6. Then go with what you have so far accumulated, to the proper official—usually the reference librarian—in your local library and let him do the rest, including making arrangements for the transportation both ways, which you must pay.

III. SUPPLEMENTING INTERLIBRARY LOANS

Four notes from the writer's experience may help in supplementing interlibrary loans:

1. *Photostating* should be seriously considered. All large libraries have departments that will photostat materials at a reasonable price. This is particularly valuable for securing copies of materials that will not be lent, newspaper articles for instance. On very short articles or chapters of books, it may be cheaper to photostat than to pay transportation both ways on the whole large book involved. The photostat has the decided advantage of remaining in the possession of the user so that it can be incorporated in his notes. See last paragraph of Section I preceding.

The H. W. Wilson Company, 950 University Avenue, New York City, is developing a business of supplying old periodicals and of photostating individual articles in them where the whole number of the periodical is not desired or cannot be sold.

2. In case no copy of a desired *dissertation privately printed* has been located, it is usually a waste of time to write the publisher. He is very apt to reply that all copies were turned over to the author. The thing to do here is to try to locate the author through some book like *Who's Who in American Education* (139) and correspond with him.

3. By scheduling your work, you may arrange to go to libraries having *bound volumes of periodicals* that will not be lent. These libraries can be located through the Union List of Serials and

supplements (101). The writer had a case of this kind several years ago with a man who needed to use extensively many numbers of the Journal of Educational Research and could not do the work at Teachers College. The Union List of Serials promptly showed that three libraries in his state had some volumes, but no one library had a complete set. He thus secured satisfactory access to all numbers of the periodical in the course of the year.

4. A *reference in an old state teachers journal*, not otherwise located, is very apt to be in the library of the state teachers association.

Most of these associations now have permanent secretaries and those with research directors are especially likely to build up files of old journals. See (97 : 23-24).

IV. REFERENCES

The following references have been noted in the text:

Call
Number

99. Winchell, Constance M. *Locating Books for Inter-Library Loan*, p. 21-39. New York: The H. W. Wilson Company, 1930.
100. U. S. Office of Education. *Recent Theses in Education*. Pamphlet Number 26, 1931. Washington: Government Printing Office, 1932. 41 p.
Lists, with annotations, 242 theses.
101. *Union List of Serials in Libraries of the United States and Canada*. (Winifred Gregory, Editor.) New York: The H. W. Wilson Company, 1927. Supplements so far, 1931, 1933.
A valuable tool for locating bound volumes of over 70,000 periodicals in over 200 libraries.

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For *practice* on borrowing from other libraries, use Number 15 of the Alexander Library Exercises. This may be adapted for publications you really would like to borrow.

CHAPTER XVI

GUIDE TO THE PROFESSIONAL LITERATURE OF YOUR EDUCATIONAL FIELD

I. VALUE OF SUCH A GUIDE

A GUIDE to the professional literature of one's field is just what the name implies. Compared with what might be given on its field, it is very brief. It points out the features of special interest and shows them in their relation to the whole. It gives details, but only significant ones, and these only under their pertinent heads and always in such fashion that the reader never loses his way. It is so arranged and indexed that any reader coming to it with a legitimate question can easily find what the guide offers on his problem. It then gives him enough so that he can go farther in any area and still know what he is doing and where he is going.

The schoolman possessing a guide to the professional literature of his field has an immense advantage over one without such a help. The former will solve many more problems within a given time. Faced with a problem, he can quickly run down the pertinent literature and devote to reading and profitable thinking on his problem, the time that the other will give to floundering around trying to find where he can get help from publications. Furthermore, the first man's solutions are almost certain to be far better. The man without a guide will find the library work so irksome that he will tend to evade it and substitute bluffing or guessing for the accurate knowledge easily acquired by the man having the guide.

The foregoing holds only for guides prepared in recent years. Changes occur so rapidly in education that a guide over five years old is apt to be out-dated in places unless for an educational interest that has stood still.

II. HOW TO LOCATE A GUIDE IN YOUR FIELD

Unfortunately, far from all educational fields now have guides to their professional literature. A guide for your field may exist as listed in Section V following. But this list is only a partial one, containing merely the guides about which the writer happened to know at the time he wrote this chapter. If Section V does not list a guide for your field, there may still be one somewhere. If it has been issued as a separate publication, the United States Catalog (45-46) or the later Cumulative Book Index (47) numbers will list it. If it has been issued as a magazine article, the International Index (54) up to the end of 1928, and the Education Index (51) since, may be used to find it. In all three indexes, look for your field as a main heading, with Bibliography as a subhead. The title of a guide will be denoted by such words as "guide" or "handbook." If the title is simply "Bibliography of So-and-So," it is probably only a conventional bibliography and not a guide. Such a bibliography contains only references and does not have notes on sources and suggestions for going further.

III. HOW TO MAKE UP A GUIDE FOR YOUR FIELD

In case you find no guide for your field, you may wish to make up one while you are attending some educational institution with a good library. Or you may induce some professor there to put a graduate student at work on such a guide. Such a project is splendid training in his field for any graduate student in education, and, if well done, renders a great professional service. Some of the guides listed in Section V were produced by the writer's students, who found them highly profitable training.

If neither of the foregoing is possible, it will pay you to consider carefully what ought to go into such a guide and start the headings for one in card form. Then keep your eyes open and as you come across good items to go under your headings, jot them down and file them properly. At the end of two or three years you will have a more or less serviceable guide, depending upon how much you have been around and used a good educational library. It will be nothing like so good as a guide produced by a

person concentrating on it, but it will still be highly useful to you.

In planning for a guide, you should consider the following:

I. PROBLEMS ON GENERAL SOURCES FOR YOUR WHOLE FIELD.

a. Limitation of Your Field

What are the exact definitions or limitations of your field? It is desirable to have some clear limitations, but it is not profitable to spend much time on hair-splitting definitions.

b. Indexes of the Literature of Your Field

What are the significant indexes of the literature of the field, under what heads do they list materials of interest in the field, how often do they appear, and how up-to-date are they?

c. Bibliographies

What are the best bibliographies of the field, what are the characteristics of each, what periods do they cover, are they annotated, and the like?

Include at least:

- (1) The best brief bibliography.
- (2) The fullest and most scholarly one.
- (3) A list of the bibliographies that, put together, will cover a reasonable chronological span and come fairly down to date with a minimum of duplication.

d. Periodicals

What, for your field, are the important periodicals (professional, lay, and related field), what important articles may be expected from each of these, what special features of interest in your field does each of them have, and what periods does each cover, and where is each indexed?

e. Reference Books

What are the best specialized reference books for your field and the outstanding useful features of each?

f. Publishers and Series of Books

What publishers can be expected to issue, or what series contain, books of special interest in your field? What are the outstanding helpful features of each such publisher or of each such series?

g. Government Agencies

What federal government agencies are particularly helpful for your field and what are the main services each can be expected to render?

2. PROBLEMS ON SOURCES FOR PARTICULAR TREATMENTS OF YOUR WHOLE FIELD.

a. Abstracts

Where may abstracts of the literature of the field be secured, just what do they cover, and how useful are they?

This will involve any existing special abstract service for the whole field, and the periodicals and any organizations that from time to time have abstracts of value to the field.

b. Book Reviews

Where may the best reviews of books in your field be expected, and how rapidly do they come out after the books are published?

c. Editorial Comment

Where may the best editorial comment of interest in your field be found, both for important happenings and for matters of general interest, and under what heads?

d. History

What are the best two or three historical treatments of education in your field?

These should include the best brief historical treatment, the fullest one, and preferably a recent one. The main features of each and the period covered should be clearly indicated.

Same for each important phase of your field, such as Finance or Methods of Teaching.

e. Legal Aspects

What is the best single treatment of the legal aspects of your field and where can you find the best brief notes for keeping up with current legal developments affecting the field?

f. Lists of Names

Where can lists of names in your field, needed for correspondence, jury method, questionnaires or any similar research or field purpose, be secured?

This should distinguish between executives, teachers, and other significant workers, and should give the exact nature and relative possibilities, particularly on biographical data, of different lists.

g. News Notes

What are the best sources of news notes for each of the important phases of your field (Examples: Items on personnel, curricula, buildings, advance information on educational associations in the field, publications and researches) and how recent are they?

h. Professional Associations

What are the important professional associations of more than state membership; for your field, just what significant activities does each carry on, what publications does it issue, and when may these publications be expected?

It is important to canvass the activities of the associations, for the write-up may give some things not ordinarily known. For example, the National Association of Secondary School Principals has an extensive group life insurance plan, and also an automobile insurance service.

i. Research Agencies

What are the chief research agencies in your field, just what kinds of work does each do, what kinds of problems has it shown interest in so far, where, in what form, and how often does it publish results, how may its publications be secured, and which of its publications are free?

j. Statistics

What are the significant sources of statistics in your field, what are the chief classes of data given in each source, how long have the data in each source appeared, when do data in each source appear, and what special compilations are valuable?

3. PROBLEMS ON SOURCES FOR SPECIAL PHASES OF YOUR FIELD.

What are the important sources of data and what are the important bibliographies for such phases of the general field as the following, and any others that you deem equally important: Curriculum, Finance, Personnel, Salaries, Buildings?

For this use the same classes of data as you use for the general field, e.g., Bibliographies, News Items, Statistics, etc. But it will be necessary to distinguish clearly between important and unimportant items. Thus for Finance and Salaries, it is necessary to stress statistical sources; for Personnel, news items should be stressed.

For the *order of items in a guide* and the kinds of notes needed on the items, see the guides done in the writer's classes, listed in Section V following. The actual guides will show what is advisable better than any possible description here.

IV. KEEPING A GUIDE UP TO DATE

Any guide, however good, begins to get out of date as soon as issued. Most of it will be serviceable for years, but some of the items—bibliographies, for example—may soon be superseded. To

keep a guide thoroughly up to date requires incessant care such as few educational workers can give, and also a knowledge of sources equivalent to that of this whole book. Nevertheless, you should watch for any better items and slip them into your guide when you find them. Two specific sources ought to be canvassed regularly. These are the particular numbers of the *Elementary School Journal* and the *School Review* that carry references on your field (see Chapter X, Section I), and the similar numbers of the *Review of Educational Research* (see Chapter XIV, Section III).

V. GUIDES TO THE PROFESSIONAL LITERATURE OF VARIOUS FIELDS IN EDUCATION

The following list of good guides published, projected, or mimeographed, is known to the writer at the time of writing this chapter. He does not claim that the list is exhaustive. Items marked with an asterisk (*) were done by his students and so conform to the suggestions of Section III preceding.

Administration, School

- *Alexander, Carter. *Educational Research* (3rd ed. rev.). New York: Bureau of Publications, Teachers College, Columbia University, 1931. 115 p.

Catholic Education

- *Murray, Sister Teresa Gertrude, Dominican Mother House, Elizabeth, New Jersey. *A Guide to the Literature on Catholic Education*. Scheduled for publication with some regular book publisher.

Commercial Education

- Grapp, Regina. "A Guide to the Literature on Commercial Education." Done under Professor Oscar K. Buross, Rutgers University, and scheduled for publication in the *Journal of Business Education*, 1935.

Dissertations and Theses on Education

- Derring, Clara Esther. "Lists and Abstracts of Masters' Theses and Doctors' Dissertations in Education." *Teachers College Record*, 34 : 490-502, March, 1933.

Elementary Education

- *McSwain, E. T. and Alexander, Carter. "Guide to the Literature on Ele-

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mentary Education." Scheduled for Elementary School Journal during 1935.

Health Education

*Chayer, Mary Ella. "Bibliography on Health Education with Special Reference to Work in the Grades." In card form in Miss Chayer's office, Teachers College. Scheduled for issuing in mimeographed form.

History

Dutcher, George M. (Ed.) A Guide to Historical Literature. New York: The Macmillan Company, 1931. 1222 p.

History, American

Hockett, Homer C. Introduction to Research in American History. New York: The Macmillan Company, 1932. 168 p.

Chapter I is a guide in itself, but it also refers to other useful guides.

Law, School

*Coffey, Wilford, L. "How to Find the School Law." Ms. copy in Professor Alexander's office at Teachers College. Publication being sought.

Edwards, Newton. "Methods and Materials of Legal Research." Review of Educational Research, 4 : 85-91, February, 1934.

Negro Education

*Cook, Peter A. W. "A Guide to the Literature on Negro Education." Teachers College Record, 34 : 671-677, May, 1933.

Occupations

*Davis, Edwin W. "Aids to Occupational Research: A Guide to Available Source Materials." Occupations—The Vocational Guidance Magazine 13 : 503-513, March, 1935.

Penal Education

*Pugmire, D. Ross. "A Guide to the Literature on Penal Education in the United States, October, 1934." Mimeographed, 12 p. Interested individuals may secure copies free at Professor Carter Alexander's office at Teachers College. A single copy will be sent upon receipt of the postage, nine cents, to any individual investigator, faculty member, or library, elsewhere, as long as the supply lasts. Address Carter Alexander, Teachers College, Columbia University, New York City.

Physical Education

*Sefton, Alice Allene. "A Guide to the Literature of Physical Education with Aspects of Health Education." Ms. copy in Professor Alexander's office at Teachers College. Publication being sought.

Psychology

Louttit, Chauncey M. Handbook of Psychological Literature. Bloomington, Ind.: Principia Press, 1932. 273 p.

Rural Education

*Cherry, Annie M. and Holdford, Anne V. "A Guide to the Literature on Rural Education." Under way in 1935. For place of publication later, write Carter Alexander, Teachers College, Columbia University.

Science

*Leichtman, Alfred W. "News Notes for Natural Science Teachers." Covers periodicals with separate news note departments. Scheduled for publication in School Science and Mathematics.

Secondary Education

*Manske, Arthur J. and Alexander, Carter. "Guide to the Literature on Secondary Education." School Review, 42:368-381, May, 1934.

Speech Education

*Tauber, Abraham. "A Guide to the Literature on Speech Education." Quarterly Journal of Speech 20 : 507-524, November, 1934.

Swimming

*Graham, Harriet K. "A Guide to the Literature on Swimming." Ms. copy in Professor Carter Alexander's office at Teachers College.

Teacher Training

*Lancaster, John H. "A Guide to the Literature on Education of Teachers." Educational Administration and Supervision 19 : 363-372, May, 1933.

United States Office of Education Publications

Witmer, Eleanor M. and Miller, Margaret C. "United States Office of Education Serial Publications." A Check List with Descriptive Notes. Reproduced in Chapter XIII, Section IV of this book, with citation there for its first appearance.

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For *practice* in acquainting yourself with the nature and advantages of a guide to your professional field and in giving yourself an opportunity to think through how to bring an existing guide up to date, use Number 16 of the Alexander Library Exercises.

PART THREE
SPECIAL LIBRARY SOURCES AND TECHNIQUES

CHAPTER XVII

EVALUATIONS OF BOOKS AND OTHER REFERENCES

I. NEED OF EVALUATIONS

APPRAISALS of references are essential in deciding the worth of publications for purchase, recommendation, or use on a particular problem. For example, a teacher may ask you to recommend a book to help her on a specific difficulty. Again, in your church groups, in some club, or in a civic organization, you may need to pass on a popular non-educational book. In any research, evaluations of references are necessary if you wish to use evidence or proposals contained in the writings of others. Of course you might attempt to estimate the worth of your references by reading them. But this would be as unwise as trying to measure all by yourself the value of the work of every doctor, lawyer, merchant, church member, or government official with whom you have to deal.

As references are ordinarily of two main classes—books or other separate publications, and periodical articles—this treatment discusses evaluations under these two heads.

II. ESTIMATING THE RELATIVE WORTH OF BOOKS AND OTHER SEPARATE PUBLICATIONS

Book lists, book reviews, discussions, and editorial comment dealing with a particular publication will help you to reach a fair estimate of it. These aids, however, should be used only as guides whose pronouncements you alone must accept or reject. You need standards in consulting a person's published statements just as you do in consulting him directly.

For evaluating a book, its name on a *book list* has the same worth as a personal introduction in ordinary life. If someone is

introduced to you by persons in whom you have confidence, as being "all right," you take for granted that he is until you have reason to believe otherwise. But your doing this will depend solely on the standing of the introducer. A book's appearance on a list of repute "vouches for" it in much the same way. Many book lists are the result of hasty hack work and have no standing. But lists prepared by such organizations as the Research Division of the National Education Association, the American Library Association, or the Enoch Pratt Free Library in Baltimore, or those given in the bibliographies of educational books by authorities in their fields, are of good repute. A book on any such list can be assumed to be of standing until you have cause to change the rating. For further discussion of book lists and their possibilities, see Chapter XVIII.

For purposes of evaluation, a *book review* should *not* be confused with an *abstract*. The latter is merely a concise listing or summary of the main facts or ideas of a published work or manuscript. A book review involves much more, as the following listing will make plain.

The *chief characteristics of a good book review* are:

1. *It gives an accurate description of the book.*

This covers the book's purpose, the author's point of view, the exact scope of the whole, a concise statement of the contents, and significant features or omissions. The description will be more vivid for a good use of quotations skillfully chosen solely for the purpose of making specific points by the reviewer.

Such description enables the reader of the review to decide at a glance whether or not he will continue reading the review, let alone going on to examine other reviews or the book itself.

2. *It definitely evaluates the book and clearly indicates the reviewer's relation to the appraisal.*

There are two main ways of evaluating a book in a review, both permissible under certain circumstances. *First*, the *reviewer* may be *trying simply to give his impressions or feelings* toward the book. This may be highly useful if he makes clear that he attempts only this and if he gives some indications of the causes

for such attitudes. For example, it makes all the difference in the world if the author of the book is his intimate friend and asked him to write the review or saw that he was asked, or if he is himself the author of a competing book. The fact that a given review is unsigned indicates the reviewer's probable attitude. In this country, such a review has usually been written or directly instigated by the author or publisher. In some foreign periodicals of high journalistic standards, e.g., *The London Times*, unsigned book reviews are as reliable as any other reviews.

The *second* way of evaluating a book in a review, is for the *reviewer to try to be impersonal and impartial*, and to indicate his bent. Although it is practically impossible for any reviewer to be wholly impartial, he can try to protect his readers from his biases. A book review striving to be impartial will further show whether or not the book:

- a. Meets a real need in its field.
- b. Has an acceptable purpose and point of view.
- c. Has accomplished its avowed purpose.
- d. Has adequately presented its facts and ideas.
- e. Has included all the mechanical aids necessary for achieving the purpose of such a book.
- f. Has satisfactory supporting evidence for each conclusion or makes clear which conclusions are merely the opinions of the author.

The review will be all the better if it compares the book with similar ones in its field, and quotes the opinions of other reviewers.

In using book reviews, be on the alert for bias in the reviewers. The significance of an unsigned review is given in the second paragraph preceding. Even with a signed review, you will always need to ask how disinterested is the writer, for human nature operates in reviewers just as in other people. Institutional jealousy or timidity may make a reviewer unfair or afraid to write candidly on books written elsewhere. Professional jealousy or cowardice may be affecting him. The expert in a field is very likely to have a book in it himself. Theoretically he is the best

man to write a review of another book on that subject. But it is often hard for him to do justice to a competing book, and if he wishes his own book to sell, he is apt to be very cautious about saying anything unfavorable concerning a rival publication. Some reviews are shot through with the effects of friendship and other loyalties very hard to detect. Some reviewers have personal idiosyncrasies which color their estimates. All in all, the more you know about a field and the men in it, consulting the biographical directories when necessary, the more you can guard against bias in book reviews written by such men.

Two other ways of estimating the *worth of a review* are often helpful. One is to *consider the periodical in which it appears*. Periodicals differ markedly on their standards for book reviews. Obviously no rating of periodicals on this item can be put permanently into print here. You will have to learn the differences through personal experience. However, you need pay little attention to reviews in any periodical having only favorable statements about all the books reviewed.

Still another way of evaluating a review is to *consider its author*. This, of course, is not an infallible test, since even the best reviewers may let down on performance at times. Furthermore, too rigid attention to this standard would eliminate some very fine work by those just starting to write reviews. In general, however, you can place the same confidence in a review by a schoolman of established reputation that you could in a judgment concerning a medical case by a physician of recognized standing.

The foregoing suggestions will be easier to apply in using reviews of books on subjects with which you are familiar. You know something about the writers of such books and so can detect bias. On other educational topics, and still more on non-educational ones, you have no such equipment for estimating the worth of a book review. In these two cases you will have to ask specialists about the book review or the book itself, or rate the book by the character of some book list or of the bibliography including it, or read several reviews of it.

Some very good items on the merits of educational books are often picked up in *editorial comment and discussions in period-*

icals likely to be interested in the particular books. These are not apt to be anything like impartial reviews. In general they are designed to induce people to read the book in question or to expose an outstanding weakness or an erroneous point of view. That is, these treatments are apt to be very eulogistic or extremely critical on certain parts of the book. They may set you to thinking, but they will not often give you comprehensive treatments of a publication.

3. *A good book review is short and pointed.*

While no arbitrary limits can be set, the chances are against one much over 600 to 750 words. This means omitting platitudes, unnecessary introduction, and superfluous words. It also means careful selection of items in the light of the other standards, and scrupulous avoidance of general statements intelligible only to the reviewer or to one who has read the book.

The review should be short because the reader will often wish to consult reviews of several books, or several of one book. Furthermore, periodicals cannot allow much space for any one review. If the reviewer cannot do a good job in small compass, it indicates strongly that his powers of evaluation which involves high selection are dubious.

III. HOW TO LOCATE EVALUATIONS OF BOOKS AND SEPARATE PUBLICATIONS

I. *Book reviews.*

To find book reviews, you must first decide the type to which the book belongs. Reviews for popular books, for textbooks, for books in special subjects, for educational books, and for subscription sets are found in different places.

For *popular books on all topics*, the Book Review Digest (104) is good from 1905 to date. It covers over fifty English and American general periodicals. The entries are arranged alphabetically under the name of the author of the book. Each entry has a brief descriptive note and excerpts from selected reviews, with citations as to where the reviews appeared. The annual cumulation has a

title and subject index. You must know the date of publication of the book in question so as to look for reviews up to two years later. While education is only one of the many fields covered by this index, it treats enough educational books to be often useful, particularly as it has now been running thirty years.

To extend the range of popular books covered by reviews, and also *to cover later books*, the New York Times Index (105) is valuable. It is highly useful for the former purpose and may sometimes review a book earlier than the Book Review Digest. It covers only book reviews in the Sunday book section of The Times.

For *books on education*, the Education Index from 1929 to date is available (51). It covers only signed reviews and does not include textbooks for elementary and high school. All book reviews are classified under the one heading of Book Reviews, alphabetically by author. If you do not know the name of the author, you will have to find it by looking under the proper subject heading in the pertinent numbers of the Index.

Before 1929, the Book Review Digest (104) will cover some of the more prominent educational books. To locate reviews of other educational books in those early years, there is no easy procedure. Such reviews are most likely to be found in educational periodicals covering the field of the book. For example, a book in secondary education will almost certainly have been reviewed in the School Review. Similarly, one in elementary education will have had a review in the Elementary School Journal. The annual volume of such a periodical usually has an index for signed reviews.

For *reviews of subscription books* such as encyclopedias and sets of books, the quarterly Subscription Books Bulletin of the American Library Association, 1930 to date, is very useful (106). Subscription books are practically never reviewed in magazines, while teachers and educators are often asked to pass judgment on their merit. The reviews in this quarterly describe the books and appraise them carefully.

For *reviews of textbooks*, there is no one place to look and no special index covering such evaluations. The Education Index

(51) does not list reviews of texts except those in the college subject of Education or something similar. The only resource for reviews of public school texts is to select a magazine likely to deal with the subject-matter field treated in the text, and look for a review there. Thus elementary school texts are likely to be reviewed in the *Elementary School Journal*, secondary texts in the *School Review*. Further, for an English text, look in the proper English educational periodical. If the text is in history, consider a suitable historical journal. You should look for reviews in the proper periodicals for the year in which a text appeared and for the year following.

For *books on a special subject*, the procedure is the same as for textbooks, except that outstanding books on special subjects may occasionally be reviewed in places so that they ultimately are noted in the *Book Review Digest* (104) or in the *Education Index* (51).

For a list of educational periodicals featuring book reviews, the following will be very useful. For lists of newspapers and magazines featuring reviews of popular and non-educational books, see Gard (103 : 148-156).

*A Brief List of Periodicals Featuring Book Reviews
of Interest to Educators*

This list was prepared in the spring of 1934 by Miss Ethel M. Feagley, Library Consultant at Teachers College, Columbia University, and is made available here through her courtesy. It is limited to the magazines taken by the Teachers College Library, but covers most of those of special interest to students of education.

BOOKS IN GENERAL

Atlantic Monthly	New York Times Book Reviews
Booklist	Saturday Review of Literature
Forum	Scribners
Harpers	Spectator
Nation	Times (London) Literary Supplement
New Republic	Yale Review
New York Herald Tribune	
Books	

EDUCATION

These magazines include reviews of books on general educational subjects and on the teaching of specific elementary and secondary school subjects.

Childhood Education	Journal of Higher Education
Education	Junior College Journal
Educational Administration and Supervision	Junior-Senior High School Clearing House
Educational Method	New Era
Educational Outlook	Oversea Education
Elementary School Journal	Progressive Education
Grade Teacher	School and Home
Journal of Education (London)	School and Society
Journal of Educational Research	School Review
Journal of Educational Sociology*	Universities Review (English)

ADULT EDUCATION

International Quarterly of Adult Education	Journal of Adult Education
	Journal of Adult Education (London)

COMMERCIAL EDUCATION

Business Education World	Journal of Business Education
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ECONOMICS*

American Economics Review	Quarterly Journal of Economics
Journal of Political Economy	

ENGLISH

American Literature	English Journal—High School and College editions
Elementary English Review	Also consult general reviews

GOVERNMENT*

American Political Science Review	Political Science
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HISTORY

American Historical Review	Current History
Annals of the American Academy of Political and Social Science	International Affairs
	Journal of Modern History
	Social Science (formerly the Historical Outlook)

* Added by Professor Carter Alexander.

HOME ECONOMICS

Journal of the American Dietetic Association	Nutrition Abstracts and Reviews
Journal of Home Economics	Practical Home Economics

LANGUAGES

Classical Journal	Modern Language Forum
Classical Weekly	Modern Language Journal
French Review	Modern Languages
German Quarterly	

MATHEMATICS

American Mathematical Society Bulletin	School Science and Mathematics
Mathematics Teacher	Scripta Mathematica

MUSIC

Music Supervisors Journal	School Music
Musician	

NURSING EDUCATION

American Journal of Diseases of Children	Hospital Progress
American Journal of Nursing	International Nursing Review
American Journal of Public Health	Pacific Coast Journal of Nursing
Canadian Nurse	Public Health Nursing
	Public Health Reviews

PHYSICAL EDUCATION

American Physical Education Association Research Quarterly	Journal of Health and Physical Education
Hygeia	Mind and Body
	Recreation

PSYCHOLOGY

American Journal of Psychology	Journal of Educational Psychology
British Journal of Psychology	Journal of General Psychology
British Journal of Educational Psychology	Journal of Social Psychology
Journal of Abnormal and Social Psychology	Pedagogical Seminary and Journal of Genetic Psychology
Journal of Applied Psychology	Psychological Abstracts
	Psychological Bulletin
	Psychological Clinic

SCIENCE

American Physics Teacher	School Science and Mathematics
Journal of Chemical Education	Science Education
Quarterly Review of Biology	Science News Letter

SOCIOLOGY

American Journal of Sociology	Social Service Review
Journal of Educational Sociology*	Sociological Review*
Social Forces	Sociology and Social Research*
Social Frontier*	Survey and Survey Graphic
Social Science Abstracts, 1929-1932 (continued by the American Journal of Sociology)	

2. *Editorial comment and discussions.*

No index covers editorial comment and discussion. To locate them, determine the type of educational periodical likely to comment on or discuss the publication. Then leaf through the magazine for the year in which the book in question was published and also the year following its publication. Some periodicals may have an index which would enable you to pick up the items. The choice of a periodical depends upon the general interest of the book. For example, the two reports of President Hoover's commissions on social trends and economic trends probably were discussed editorially and in letters from readers in practically every educational periodical in the country. On the other hand, a book on mathematics would very seldom receive editorial comment or discussion in any educational periodical except one devoted to mathematics or science.

3. *Periodical articles.*

Sometimes a book arouses so much interest that periodical articles are written about it. These will be indexed the same as any other articles, but very often the title alone will not indicate just what book is discussed. A periodical covering the same subject matter as the book would be the one most likely to contain such articles.

IV. ESTIMATING THE WORTH OF PERIODICAL ARTICLES

For evaluations of periodical articles, the same general principles hold as for books. Since the educational articles listed each month by the Education Index (51) number several thousand, something corresponding to book reviews, for evaluating these articles, would be a great convenience. Unfortunately nothing of the kind is available. There are abstracts and digests for different fields such as biology, social studies, psychology, and engineering. These give only abstracts of the contents and little or no evaluation. About the only helpful evaluations of periodical articles appear in editorial comment, discussion, and other articles. Locating such comments on periodical articles is apt to be like hunting needles in a haystack. Except for occasional papers sure to be commented on widely and promptly, it is usually profitless. For what can be done to locate such articles, see Section V following.

V. HOW TO LOCATE EVALUATIONS OF PERIODICAL ARTICLES

In general, an evaluation of a periodical article is likely to appear several months to a year later in the same periodical, unless the first article was highly controversial. If the article was of such nature, the editor may have scheduled the other side of the case in the number preceding or soon after. Sometimes both sides of a case are presented and each writer has seen the other paper before printing. In other instances, a criticism of an article is likely to be found in another journal which would oppose the point of view of the first journal. Thus, in the magazine *Progressive Education*, for example, one would expect comments on articles in other periodicals.

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For *profitable practice* in evaluating references, use Number 17 of the Alexander Library Exercises. This will give you experience in locating book reviews and assistance in estimating their worth. All the practice can be in connection with books or articles that you have some real need for evaluating.

VI. REFERENCES FOR FURTHER READING AND USE

For a *critical study of reviews* appearing in *educational journals*, see:

Call
Number

102. Monroe, Walter S. and Hull, Mabel R. "A Critical Review of Book Reviews." *School and Society*, 29:521-26, April 20, 1929.

To understand the *possibilities of book reviews* as seen by professional reviewers and to secure lists of periodicals featuring such reviews, see:

Call
Number

103. Gard, Wayne. *Book Reviewing*. New York: A. A. Knopf, 1928. 159 p.

The *most useful library indexes* for locating book reviews are:

Call
Number

104. *Book Review Digest*. New York: The H. W. Wilson Company. 1905—

Described in Section III, 1 of this chapter. Monthly with semiannual cumulation in August, annual cumulation in February, and larger cumulations covering several years.

105. *New York Times Index*. New York: New York Times.

A very detailed and well-indexed guide to all items of importance appearing in this paper. Monthly, with an annual cumulation after December, 1913—.

For *book reviews*, look under the author's name alphabetically under the main heading of Book Reviews. Some are also listed under the author's name as a main heading, but the other way is surer.

106. *Subscription Books Bulletin*. Chicago: American Library Association, 1930—.

Described in Section III, 1 of this chapter. Quarterly with annual index in the October number. Strictly speaking, this is not an index, but contains the reviews themselves.

CHAPTER XVIII

BOOK LISTS

I. VALUE OF BOOK LISTS FOR THE EDUCATOR

THE usefulness of book lists for determining the worth of a given publication was discussed early in Section II of Chapter XVII. An even greater value of such lists is that they *give the educator an easy start on many of his problems* that require reading. Although a pertinent book list found by him may or may not have real authority back of it, the chances are that it was prepared by a specialist on the subject or that such an authority coöperated on it. This specialist may be a college or university professor of education, a state high school supervisor, a competent library worker, or an experienced teacher working with a curriculum committee. In any event the list is likely to be far better than the schoolman could get up quickly by himself and it usually will save him much time and energy.

II. TO LOCATE BOOK LISTS ON EDUCATIONAL PROBLEMS OR TOPICS

For locating book *lists with any educational slant*, the Education Index (51) and the annual roster of publications of the American Library Association (for the latter see Section IV following) will usually be sufficient. The Education Index has cited many such lists since it started in 1929, but it did not begin to cover systematically the publications of that association until some time in the latter half of 1933. Lists older than 1929 are seldom of much value except for comparison in research. If they must be had, however, they are most apt to be located through the individual entries in the bibliographies of likely books cited by the Education Index.

The listings in the Education Index appear under the *headings*

of Book Lists, with subheadings and cross references, and of Education, with Bibliography as a subheading. A book list for any particular topic will be entered under the heading for that topic, often with a subheading of Bibliography. Because of the difficulty in getting the right heading for that topic as used by the Education Index, it often saves time to look under the general heading of Book Lists with its subheadings.

The *wealth of book lists cited by the Education Index* is indicated by the following partial roster of entries known to have been given there up to December, 1934. Every heading or subheading in this presentation covers one or more book lists. Many other such lists can be picked up under their topic headings, with the subheading of Bibliography.

PARTIAL ROSTER OF BOOK LISTS CITED BY THE EDUCATION INDEX
UP TO DECEMBER, 1934

Education books, best sixty in one year	Library, educational (continued)
General intelligent reading	Sixth grade
Books for thinking Americans	Gift books
Fifty notable books for a given year	Higher education
100 best books for an education	Alumni
Hobby riders	Collegiate
Inspiration point books	Home readings
Instinct, books meeting needs on	Inexpensive
Library, church	Reading, supplementary
Library, educational	Grade school course of
Children's books	Supplementary
Classroom	Rural school
Correlation with library	Secondary education
Continuation school	High school
Elementary school	American literature
Curriculum subjects	Browsing
Fifth Grade	Classics
General	Fiction
\$400 one	Juvenile
Kindergarten	Modern languages
Primary grades	French
Science	Recreation and leisure
Second grade	Reference books
	Junior college
	Junior high school

Library, educational (continued)	Reading circle
Ninth grade	Pupils
Reference books	High school
Seventh and ninth grade,	Teachers
leisure	Superintendent's professional li-
Parent-teacher association	brary
books	Vocational boys

III. TO FIND BOOK LISTS ON NON-EDUCATIONAL PROBLEMS OR TOPICS

The best way to locate *general lists* is through the Readers' Guide (60) under the heading of Books and Reading, especially the subheadings of Best Books and Bibliography. The United States Catalog (45) under the heading of Books and Reading gives a number of references which are really book lists or contain such lists. There are "see-also" references for such particular divisions as Children's Literature.

To locate a list for a *specific purpose*, e.g., Spring Books or Gift Books, or on a particular topic, e.g., Chemistry, look for the likely heading. In both these cases, where the heading has any material number of entries, scan all entries and examine closely those under any subheading of Bibliography.

For book lists in *technical and special fields*, some of which are more or less educational, use the International Index (54) or such special library aids as the Agricultural Index (49), Engineering Index Annual (6 : 17) and Industrial Arts Index (53). The International Index cites book lists under the heading of Books and Reading, with "see-also" references to such headings as Reading Lists, Literature, or Book Selection. It also cites them as a subheading under a main heading, e.g., Economics. The special indexes like the Industrial Arts Index use the same heading of Books and Reading, but have fewer "see-also" references.

IV. TO LOCATE BOOK LISTS FOR ANY PARTICULAR CLASS OF READERS

Such lists will be found sometimes for educational groups by using the Education Index as advised in Section II preceding, and for non-educational groups by similarly employing the Readers'

Guide (60) as suggested in Section III. The *best source*, however, is the *pamphlet cited below*. This gives all the book lists of the American Library Association at the time. It will have many entries not discoverable through the Education Index (51) and Readers' Guide (60). Any library you are using will have a copy of this pamphlet.

Call
Number

107. American Library Association. Books and Pamphlets on Library Work. Chicago: American Library Association. Annually.

Full bibliographic data with excellent brief descriptions for all publications of the association.

V. TO BRING A PUBLISHED BOOK LIST UP TO DATE

Three procedures, with rapidly increasing difficulty from the first to the third, *should be canvassed*. *First*, try the author or organization bringing out the original list. He is apt to keep up with material in that field, often with a view to publishing a later list. When there have not been many valuable additions since the original list, he will be likely to let you have these if you guarantee not to publish or forestall him in any other way. *Second*, comb the possibilities of the periodicals and agencies concerned with books in the particular field. The periodicals are apt to have departments of Publications Received that will list new books, and book review sections. See Chapter XVII, Section III. *Third*, follow the procedures for extending and bringing up to date, bibliographies given in Chapter X, Sections III and IV, and Chapter XIII, Section II.

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For *practice* that should result in your locating good book lists on topics of interest to you, use Number 18 of the Alexander Library Exercises.

CHAPTER XIX

STATISTICS NEEDED BY EDUCATORS

I. IMPORTANCE OF STATISTICS FOR SCHOOL WORKERS

EVERY educator needs to know where and how to find the statistics (classified educational figures and related numerical data) that "count" in his professional specialty. Without this knowledge, he cannot, in arriving at the truth, presenting a case, and bringing conviction to persons charged with deciding educational policies, employ methods that have a long history of successful use.

The *use of statistics* has become so widespread in daily life that they are accepted as a "matter of fact." For example, ask yourself to what extent they are used on the editorial pages of your paper. If it endeavors to carry conviction to thoughtful readers, intelligent voters, or persons in prominent positions, you will find fully half its editorials making their points through the use of numerical data, figures of speech involving numbers, or statistical treatments. A periodical with a huge popular subscription list like the *Saturday Evening Post* probably could not run an editorial page without using statistics. If your paper has a question-and-answer column, you will find many of the questions requiring numerical answers. Most political campaigns, and most praise of governmental policies or criticisms of them, are based on numerical data. The same thing is true of many radio talks, community lectures, and popular magazine articles. All government reports and those of business firms use figures largely to present their cases.

Much of this widespread use of numbers is due to the fact that *in no other way can a group be described so accurately and so concisely*. For example, take this ordinary statistical statement: Average teacher's salary, \$1,500; average deviation, \$200. An

equally comprehensive description in words only would take a number of sentences and even then could not approach this for accuracy without the use of figures.

To the educator wishing to make use of this widespread tendency to employ statistics, his *practical problems offer many opportunities*. He must use numerical data if he wishes to know such things as the following:

The salaries to be expected in his particular line of educational work.

The best section of the country in which to locate for work in his line.

The relative demand for competent workers in different phases of education.

The prospective enrollments in his work and in similar work.

He must know how to locate and use statistics whenever he wishes to:

Make a case for some educational proposal.

Make comparisons between his school and other schools on such items as salaries, teaching load, financial phases, and the like.

Study trends.

Lay down policies for planning, especially for buildings, curricula and schedules, finances, publications and reports.

Write professional books, articles, reports, and editorials dealing with quantitative aspects of education.

Frequently he needs to discover statistics that will enable him to check the figures of others on the foregoing and similar matters.

Three kinds of statistics are useful to the educator: (1) Figures treated by simple arithmetical processes and clearly presented; (2) figures treated by simple statistical techniques and with results given in such terms as "average," "median," or "average deviation"; and (3) research findings employing elaborate statistical methods and reporting results in such highly technical terms as the "coefficient of correlation." He may need to secure figures which he may himself turn into any one of the three kinds of statistics. All three enable him to study the quantitative aspects of whatever problem or topic engages him. Including such aspects tends to give his studies a clarity and exactness not otherwise attainable.

For suggestions on the kind of *statistical knowledge needed for reading educational studies*, the following is excellent:

Call
Number

108. Tyler, Ralph W. "Statistics Needed by Readers." *Educational Research Bulletin* (Ohio State University), 9:205-11, April 16, 1930.

Suggests desirable content for courses to train students to read statistical literature intelligently.

II. NECESSARY PRELIMINARY CAUTIONS IN LOCATING STATISTICS

Valuable as numerical data are to the educator, he must be wary about using them or he will get into the hottest of educational waters. Statistics may be employed to prove either side of a case and the same figures are often utilized for this purpose in educational controversies as well as in political campaigns.

The most important cautions to observe in locating educational statistics are:

1. *Collect statistics only for problems lending themselves to statistical treatment.*

This caution is often overlooked by enthusiasts. New undertakings, the first pioneer adventure of its kind, and the like, cannot be justified to any great extent by statistics. For one thing, there are no figures on current practice to support the innovation. It has to be launched on a faith basis rather than on a statistical basis. Also, on many problems involving intangible values or quality, statistics may not be of much aid. Certain phases of historical study do not successfully employ figures, although statistical data often show trends more exactly than anything else.

2. *Keep in mind that statistics are frequently not titled as such.*

Certain divisions of the United States Government and of the state governments issue publications entitled "Statistics of Cities" and the like. However, most of the statistics you will need will be found in publications not even labeled "statistics" and often in a table whose title gives no indication of containing any figures of interest to you. For many of the statistics you seek, you will

have to decide which kind of publication would be likely to contain tables giving the desired figures.

3. *Be sure you know just what the statistics are.*

Some statistics are primary ones, collected by governmental agencies and easily understood. There can be little excuse for misunderstanding the census figures showing the number of people of different ages in a given area in a certain year. Other statistics are derived or calculated, particularly in comparison, and it is not so easy to know just what they mean. Many a superintendent of schools has at one time or another been annoyed at a charge of having a high per-pupil cost for his schools. The accusation may have been based on figures in a report of some other superintendent who computed per-pupil cost on enrollment, whereas the first man had reported his cost on average daily attendance. The enrollment figure, being substantially larger than the average daily attendance one, would give a fictitiously smaller per-pupil cost for the city using it in a comparison. Another example is a certain large city system some years ago accused by taxpayers of having a much larger expenditure for supervision than did another city. The facts were that the second city spent more on supervision but charged much of it to the individual schools, while the first city charged all its supervisory work to the central staff. Such difficulties are very apt to arise in connection with any statistics gathered from different sources and combined in the same table. This is particularly true of figures collected at different dates some years apart.

To know just what the statistics are, *guard against bias in the collecting agency*. All agencies engaged in propaganda cite numerical data favoring their side, as was the case for years on prohibition. If the statistics you find have been presented with bias, this fact is apt to be shown by indications that only portions of the numerical data needed for adequate interpretation have been presented. For example, a presentation of average salaries for a given state may neglect to differentiate between the high salaries in one very large city, and the low salaries in the remaining area of the commonwealth.

4. *Be sure the statistics are accurate.*

Figures are often copied or printed incorrectly. They can be checked by considering whether they agree with other statistics, or by the reasonableness of the case. If one item in a tabulation, for example, is larger than the total, something of course is wrong until the data are checked. Inspection of the table may show whether the item itself, or the figure for the total, is incorrect.

III. HOW TO LOCATE STATISTICS

1. *Procedure.*

To locate any needed statistics without waste of time, two *steps* in the order given are necessary:

a. Get clearly in mind the characteristics of the statistics desired.

Statistics may be governmental or non-governmental, current or old, primary or derived, published or unpublished. Often they will have one characteristic from each classification. For example, if you wish to study the ability of your state to support education, you will certainly require primary, governmental, current, published statistics. These characteristics are discussed in succeeding paragraphs.

b. Decide which sources are likely to contain statistics with the desired characteristics.

Sources for data with given characteristics are indicated in the following discussion of the various kinds of statistics.

2. *Governmental statistics.*

Governmental agencies at all levels regularly collect most primary or original statistics. At the lowest level, each local government such as a county, city, village, township, or school district, collects numerical data, some of which it reports to the state or federal authorities. Some local figures reach the federal government only through state agencies which also collect numerical data of their own. The federal government in turn collects many statistics by itself. The higher the level of government, the more its reports of statistical data collected in lower levels tend to become only summaries.

The federal government is the source of *comprehensive American statistics on almost any topic* through the publications of the United States Bureau of the Census. Price List 70, free from the Superintendent of Documents at Washington, gives a list of the statistical publications available, furnishing a quick way to find a given publication of this Bureau. The list does not include out-of-print items. For more exhaustive searching, Boyd (85) can be used to locate the appropriate kind of publication likely to contain the desired figures.

Most *federal statistics on education* appear in the publications of the United States Office of Education, particularly in the Biennial Survey, also published in chapter "separates" as Bulletins. Up to 1917, such figures regularly appeared in the second volume of the Annual Report of the United States Commissioner of Education. Price List 31, free from the Superintendent of Documents at Washington, can be used for quickly locating available statistical titles on education by subjects. It does not do for materials out of print. Many publications of the United States Office of Education on special phases of work, or particular kinds of schools, give pertinent statistics although there will be nothing in the titles of the publications to indicate this.

For many projected studies in education, it is desirable to know when certain statistics may be expected. Accordingly, the writer secured from Miss Bess Goodykoontz, Assistant Commissioner, United States Office of Education, the *statistical program of the Office, 1933 to 1943*. The statistics for the earliest years in this period have appeared or are appearing. For any subsequent year, its statistics may be examined in the Office from six months to a year after its close, and they will be published in some form a year or two later still. The remainder of these notes and the table on the statistics of the Office are from Miss Goodykoontz, edited to fit them into this chapter.

In general, the statistical program of the United States Office of Education consists of (1) periodical studies, and (2) special studies made to answer specific needs. To distribute the tabulation and publication load as evenly as possible, the periodical studies have been arranged (with but few exceptions) on a

biennial or quadrennial basis. They each represent collection of statistics from a specified source; that is, collection of statistics of state school systems from the state departments of education; collection of rural school statistics from county superintendents; collection of higher education statistics from colleges and universities, etc.

Special statistical studies are made by the Office as need dictates and time permits. Many of them are made as by-products of the inquiry forms used for the periodical studies; that is, the special study made of Small City School Systems in 1933-34 was based on data from the inquiry forms of 1929-30 and 1931-32. Other special statistical studies require a separate collection with their own individual inquiry forms.

The ten-year schedule on page 194 is a "working schedule"; it must of course be reasonably subject to change.

State statistics on education are normally to be expected in the report of the state superintendent of education or the corresponding official. This report may come out biennially, but in that event usually gives the figures for each year in the biennium. Some state departments issue special bulletins dealing with statistics for a certain kind of school, city school systems being a common example.

Some ideas of the possibilities in state educational statistics and of the wide variations to be expected in different states will be gained from:

Call
Number

109. Reavis, William C. "Items of Information Collected by Departments of Public Instruction of Ten Representative States." *Elementary School Journal*, 29 : 666-73, May, 1929.

Educational statistics for local areas are to be found in the annual report of the local school districts. The report of the board of education usually has the most statistics. Sometimes, however, educational figures, particularly on finance, may appear in the separate reports of special agencies. See Chapter XII, Section III, for directions on securing copies of these local reports in smaller communities.

194 SPECIAL SOURCES AND TECHNIQUES

UNITED STATES OFFICE OF EDUCATION
PROGRAM OF COLLECTION OF STATISTICS, 1932-33 TO 1942-43

PERIODICAL STUDIES *									Special Studies §
Year	State	City†	Higher Education	Public High Schools	Rural	Private Elementary and Secondary	Library‡	Special Schools for Handicapped	
1932-33		C				x			Trade and Technical Schools, 1933. Economic Outlook in Higher Education for 1932-33. Economic Situation in City Schools, 1932. Effects of the Depression on Rural Schools, 1932. Part-time and Continuation Schools, 1933. Engineering Enrollments, 1932-33. Economic Outlook in Higher Education, 1933-34. Economic Outlook for City Schools, 1933-34. Small City School Systems, 1930-32. City High Schools, 1932. Economic Outlook in Higher Education, 1934-35. Statistics of Education of Negroes. Financial Situation in the Schools, 1934-35. Children and Schools on U. S. Government Property. State Provisions for Equalizing School Costs. Per Capita Costs in Cities, 1933-34. Training Status and Salaries of Rural Teachers, 1934-35. The Elementary Principalship, 1933. Federal C.W.A. Survey for the Deaf and Hard of Hearing, 1934. Per Capita Costs in Cities, 1935-36.
1933-34	x	F	x	x	x				
1934-35		C					S	x	x
1935-36	x	A	x						Per Capita Costs in Cities, 1937-38.
1936-37		C				x	P		
1937-38	x	F	x	x	x				Per Capita Costs in Cities, 1939-40.
1938-39		C					x	x	x
1939-40	x	A	x						
1940-41		C				x			Per Capita Costs in Cities, 1941-42.
1941-42	x	F	x	x	x			x	
1942-43		C					x		x

* Listed in each case for the year for which the statistics are collected.

† C means a per capita cost report of city schools; F means a full statistical report; A means an abridged report with less detail than is found in F.

‡ S means School Libraries (including college and university libraries); P means Public Libraries.

§ Special Studies are made, and usually published, during the year for which they are listed; the data are usually for that year, but are sometimes from data previously collected.

Many governmental statistics appear very late because of the tendency of government printing to be slow. Hence you can sometimes find these government statistics in certain annual reference books earlier than in the government publications. These reference books, however, tend to take figures from the largest governmental agencies first. A good example is the World Almanac (18). This contains important statistics on all subjects of current interest. Many of the data are collected by government agencies. As the sources are usually indicated, the figures can be verified. Some tables show comparison, usually over a ten-year period, although many go back much further. There is an extensive alphabetical subject index, which will be found near the front of the book.

For figures on local areas, a local almanac may be useful, e.g., the Texas Almanac gotten out by the Dallas News.

3. *Non-governmental statistics.*

Many non-governmental agencies and special investigations collect original statistics, but they usually concentrate on single lines of interest, or sample, so that they do not have final data. Many of these investigations obtain their data by questionnaires or interviews and hence are very limited. Sometimes they confine their statistics to replies from members of a special association and hence are representative only for its members.

4. *Current statistics.*

It is fairly easy to locate current statistics, either published or unpublished, if you know where to look for them. Since they are current, the collecting offices often have the unpublished data in such form that you can easily secure them if you go to the right governmental office. The same is true of many non-governmental agencies, provided you do not forestall the agency in publication. Many current governmental figures are available through private sources before they come out in the Office publications. As was pointed out in Chapter XIV, the National Education Association makes available many figures of the United States Office of Education long before the Office issues them in its official publications.

5. *Old statistics.*

These exist in published form and the government archives contain a great many unpublished figures collected at the same time as the corresponding published ones. It is possible for special scholars or students to go to the archives and examine the old unpublished statistics. In most government offices, however, the old manuscript data have been filed in such a way as to be extremely difficult of access. For old statistics the educator therefore had better content himself with published figures if it is at all possible to achieve his ends through them. Old unpublished figures in non-governmental agencies are almost unprocurable. Such agencies as have been in existence for many years and have adequate means may have their old unpublished data in shape to be used by outsiders. Many of these agencies, however, are ephemeral. When their special studies are over, they go out of existence and their unpublished data disappear.

Statistics to show trends are of course to be expected in the issues of government statistical publications giving the figures for the different years to indicate the direction of events. Such data may be sought with confidence in two other sources usually requiring less effort. First, the general reference books containing statistics are almost certain to give figures for different years in parallel columns. Thus without actually knowing it, one may be sure that the World Almanac (18) in giving recent vote statistics will also present figures for several past elections. Second, the regular statistical presentations in official publications for the years ending in 0 and 5 are apt to give comparative figures for previous similar years. You can be pretty sure of getting in a bulletin giving statistics on any phase of education for the year 1930, comparable data for 1920, 1910, 1900, and possibly some earlier years.

6. *Primary and derived statistics.*

Primary statistics are those secured by the original collecting agency, whether governmental or non-governmental. They are the most accurate of all statistics but they are often somewhat inaccessible and in such form as not to show significant relation-

ships clearly. Some of the most useful statistics are the derived ones using these primary or original data. *Derived statistics* appear with great effect in many governmental publications, especially in bulletins of the United States Office of Education and in publications like those of the National Education Association (see Chapter XIV).

A good example of the difference between original and derived figures occurs in connection with certain income studies. The National Bureau of Economic Research of New York City collected some figures on income for the whole country and by states for the three years ending in 1921. No figures on income by states have been issued since. However, certain studies have calculated the income by states on the assumption that the total national income which was known in later years, would split up in exactly the same proportions as it did in the years 1919 to 1921. Some states may have kept the same relative income, but certainly the figures would be unreliable for such states as Texas and Florida, which increased their business activities a great deal after 1921.

7. *Unpublished statistics.*

For locating unpublished statistics, the best plan is to *secure copies of the blanks used in collecting the figures*. This involves considering exactly where to go. For instance, unpublished figures from individual school districts are likely to be in the offices of county or township superintendents, whichever collect from local districts. These local superintendents are required to fill out blanks for their state departments of education. The state organization will require the local superintendents to itemize by districts. Consequently, by going to the state department, you will find the statistics for all the districts for the state. To know the available unpublished statistics on children, get copies of the report cards used. If the reports of the local superintendent to the state department of education do not cover the items on the report card, you may know that the report card data will be available only in the local districts.

In securing unpublished statistics, it often pays to *prepare a*

blank for someone in the collecting office to fill out, instead of making a personal trip. The following experience of the writer will illustrate. For years he needed, on the finance section of school surveys, statistics on city school systems from the United States Office of Education long before the figures would be published. By making out a blank calling only for items that he knew would be available, since they had appeared in previous publications, putting together items that were close together in previous tables, he could get what he wished easily. He had to pay a clerk for copying off the data, but this usually cost about four or five dollars as against a cost of thirty dollars for a personal trip to secure the same result. The Office was glad to take a clerk off the payroll long enough to copy the figures in regular hours. The clerk did not care what she worked on, and the Office reduced its expenditures of government money just that much. Many federal and state government offices pursue the same policy.

IV. STATISTICS ON SPECIAL TOPICS OF INTEREST TO EDUCATORS

For *summary statistics on all topics*, including education, consult:

Call
Number

110. United States. Bureau of Foreign and Domestic Commerce. Statistical Abstract of the United States. Washington: Government Printing Office, 1878—.

Includes summary statistics of every kind collected by the federal government. Many of the figures are in tables showing comparison over a period of years, some as far back as 1800 or 1879. Index to tables near the front of the volume and an alphabetical one by subjects, at the back.

This has been issued by various departments in its history. See Mudge (6 : 99).

World Almanac (18)

Uses for statistics described in this chapter.

Statesman's Yearbook (17)

Uses for statistics described in this chapter.

For *statistics on school finance*, look up the pertinent topics in:

Call
Number

Alexander and Covert (22).

Under each important topic are notes on where to locate the appropriate statistics. These also cover related fields such as Wealth, Income, Taxation, Expenditures for Luxuries, Cost of Government, and the like.

Population statistics are collected by the federal government for the years ending in zero and are available in some form beginning with 1790. The most important figures appear in the Statistical Abstract or World Almanac previously noted. The detailed data are in the decennial census volumes and in numerous "separates" on special items. The various publications containing these figures may be traced through Price List 70, free from the Government Printer at Washington or through Boyd (85:222-227). Some states, New York and Florida for examples, formerly had censuses in the years ending in 5, but as far as the writer knows, all these have been discontinued.

For *statistics of foreign countries*, the Statesman's Yearbook (17) is a good general source. Special publications dealing with individual countries may be located through Mudge (6-9).

Statistics for higher educational institutions appear in their annual catalogs or similar publications. For comparative purposes, however, the publications of the United States Office of Education are much more convenient. These publications are separate for different types of schools, as teacher-training institutions, state universities, land-grant colleges, and so on. The publications for any given type of institution may be located through Price List 31 mentioned previously. Such statistics are very slow to reach the state of print. Many of them are, however, issued in mimeographed form much earlier. See also Chapter XIII.

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For *practice* in locating educational statistics, use Number 19 of the Alexander Library Exercises. If you do this exercise well, you will henceforth know where to find the most significant statistics for your area of education.

CHAPTER XX

LEGAL ASPECTS OF EDUCATION

I. MEANING AND IMPORTANCE OF LAW FOR EDUCATORS

THE world over, law has a unique value for all concerned with social institutions like the school. While much hasty and unwise legislation passes in many countries, nowhere outside the law, which Woodrow Wilson defined as "crystallized custom," are the principles of human relationships so well stated. Accordingly, the educator concerned with securing *fundamental principles for any phase of education*, will do well to go promptly to the chief legal formulations of conduct involved.

In the United States, law has another great importance for the educator. It represents the *aspirations of the American people*. Many of our laws are passed, not with much expectation that they will be generally obeyed, but that they will serve as ideals toward which to work, in the hope that in time all the people will be educated up to obedience. Good examples of such laws in non-educational fields are the constitutional amendments dealing with Negroes and with prohibition. In education, a conspicuous example of this type of legislation has been the status and actual observance of compulsory education in many states. Consequently, any educator who wishes to know the aspirations and ideals of the American people on any aspect of education will do well to examine promptly summaries of the pertinent legislation, especially recent laws.

The practical educator must know about the school law affecting his work. The law states that in this work he must do specific things and avoid others. In certain areas it leaves him considerable freedom for determining his action therein, and he and the school authorities over him need to lay down policies. Constantly such questions as these confront him: What is the legal basis of

the school? Is a sick teacher entitled to pay for the time she misses? Who should nominate teachers? When and where does the responsibility of the school for the conduct of pupils begin and cease? For all these and similar questions, the practical educator cannot secure sound answers without looking up the actual laws involved and the pertinent formulations of legal principles.

II. DIFFICULTIES IN FINDING THE LAW ON AN EDUCATIONAL PROBLEM

Finding the law, and understanding what it means after it is found, involve serious difficulties. There are many kinds and sources of law. *Locating the exact wording* of the pertinent law on a given educational problem is often only a beginning.

Discovering what the wording means is difficult because such interpretation can be found only in decisions of courts and of administrative officials charged with judicial functions. To find the "ruling case" in a number of conflicting decisions or interpretations requires special law library techniques and a broad knowledge of legal principles and practice. The meaning of a given wording is all the harder to run down because the interpretation changes from time to time.

Such difficulties arise because the law deals with human relationships, always complex and, under modern conditions, rapidly becoming far more so. In consequence, the laws involved are increasingly intricate. To deal adequately with all the legal aspects of any one educational problem nowadays indeed "takes a Philadelphia lawyer." Such dealing certainly should be attempted only by one with some legal background and specific training. At the same time, the schoolman desirous of succeeding in the field or in research may fairly easily acquire a simple perspective of the school law and its possibilities for his needs. To help the reader attain such a perspective, is the aim of the rest of this chapter.

The chief kinds of law are three:

1. *Statute law.*

Statute law covers law actually passed and on the records of

some law-passing body. It includes treaties, constitutions, statutes (federal and state), ordinances (city and other local areas), and court rules. The law of a higher division, as of the federal government, controls that of a lower division, such as a state. A constitution always takes precedence over any statute enacted in its legal area.

2. *Court decisions.*

Court decisions deal with interpretations of the statute law and show what it means in a given situation. They also include applications of the common law where there is no statute covering the problem, and "equity" if application of the common law would not do justice in the particular case.

Court decisions are rendered by various federal and state courts, the decision of a higher court taking precedence over that of a lower court. Certain "jurisdictions" or court areas in various parts of the country have greater authority in practice than those of other areas, although there is no legal foundation for this. Thus the decision of a court in New York State would be more widely accepted than would that of a court in many another state.

3. *The common law.*

In most states where the statutes are not clearly adequate to determine the law on a given matter, the common law derived from England is consulted. This often is an important factor in a court's arriving at its decision in such a case. Although the common law was originally a body of traditions and customs passed on by word of mouth, it is now recorded in court decisions.

The *most important sources* of law are:

1. *For the law itself.*

Session laws for each session of the law-passing body are usually issued. Thus we have such publications for Congress, state legislatures, and city councils. From time to time these are compiled, consolidated, and revised into "statutes," or for cities, "ordinances."

2. *For the interpretation of the law.*

Reports of the court decisions for the various courts are regularly issued by the levels of government concerned. Commercial law publishers also issue collections of these reports or abstracts of cases and decisions. The meaning of any law is not finally determined until there has been a decision by a court of proper authority.

3. *For formulations of principles of law.*

These occur in encyclopedias of law and in textbooks or treatises on law in general, on special kinds of law, and on the law on particular subjects. They are made up mainly from citations of court decisions which have already attempted to lay down principles.

4. *For news notes.*

Found in various legal periodicals, these notes give clues to new legislation, cite recent cases and court decisions, and are often very helpful in pointing the way to principles and interpretations.

III. HOW TO FIND THE LAW—BASIC SUGGESTIONS FOR THE NOVICE

1. *Seek general principles first.*

It is impossible for any layman to remember the multiplicity of legal details and their bearing on a problem, even if he were able to find them. He can best find these principles in legal encyclopedias under the headings of "school" or "school districts" and in textbooks on school law or on special phases of such law.

2. *Know how to find and use a legal dictionary.*

In law many words do not mean the same as in ordinary usage, but instead have certain precise legal meanings. Even law encyclopedias and textbooks presume that the reader knows some legal terminology.

3. *Seek statute law before the common law.*

In any case of conflict, statute law supersedes common law.

Moreover, common law is very difficult to find and to interpret. Statute law is easily available to the educator in the session laws and school codes of the states or other legal jurisdictions of interest to him. In law a code is called a "revision" or "compilation."

4. *Secure the last revision or compilation of the school law needed.*

Not infrequently schoolmen use copies of the school law several years old. The particular statutes of interest to them may have been revoked or greatly modified by laws passed by a later session of the legislature. To avoid such a difficulty, note the date of the code used and take pains to secure in addition copies of any later session laws. If only the substance of the laws is needed, beginning with 1925-1926, the State Law Index will be useful (9 : 29).

5. *Take the interpretations of experts.*

Even experts take time to find the ruling case decisions. For the novice, finding them is impossible except by accident. Even when a case decision is found, it is very difficult to understand unless one has had legal training. For example, the "dictum" of the court (opinions or steps in reasoning taken in arriving at the pronouncement) must be distinguished from the actual decision. Only experienced legal students can safely make that distinction in many cases. On important legal problems connected with action in educational matters, there is only one safe rule for the novice: consult a good lawyer.

6. *Keep in mind how proposals from various sources get enacted into law.*

The professionally alert educator is often interested in securing better school laws or in opposing legislation inimical to education. To do either successfully, he needs to know the *steps* through which ideas pass to the *final state of enactment* into law. These steps in outline are as follows. Details may be found in any good book on civics or government.

- a. Someone has an idea that there should be a law passed for a specific purpose. This person may be a member of the law-passing body concerned (city council, state legislature,

or congress). More often it is some outsider or some association that suggests the idea, or even hands a proposed bill to the member.

- b. The member introduces the bill into his house of the law-making body.
- c. The bill is sent to the clerk's table for recording.
- d. The bill is then referred to the proper committee in that house.

In the committee, the bill is either

- e. Killed,
- f. Endorsed,
- g. Amended, or
- h. Re-written.
- i. The bill is then taken up in committee and
- j. Discussed in secret or in a public session (hearing).
- k. A bill reported out by the committee has three readings, during which period,
- l. It is debated and amended.
- m. If passed in the house where introduced, it goes to the other house of the legislature involved.
- n. There it takes about the same steps as in the first house.
- o. If it is amended at all in the second house, representatives from both houses decide upon its final wording, and then it is put to a final vote.
- p. If passed by both houses, it goes to the executive concerned (mayor, governor, or president).
- q. If the executive vetoes the bill, it goes back to the law-making body to take its chances under the laws governing vetoes for that body. If the executive signs the bill or otherwise lets it pass, or if it is passed by both houses over his veto, it becomes a law unless
- r. The supreme court involved declares it unconstitutional. If constitutional,
- s. It remains a law.

Inspection of the foregoing steps will show that *keeping up* with a proposed bill *requires knowledge of the following docu-*

ments, most of which will at some time be available in printed form:

- a. The original proposal.
- b. Text of the bill as introduced.
- c. Minutes of the committees concerned at all stages of their action on it.
- d. Minutes of both legislative houses at all stages of their action on it.
- e. Record of executive's action on the bill.
- f. Text of final law.
- g. Court action, if any, on the law.

The *amount of detailed knowledge* of the proposed law *needed* by an inquirer *should be settled early* by him. In some cases, newspaper notes or summaries, or accounts in his state educational journal, in the Journal of the National Education Association, or in School Life, may suffice. In other instances he may require copies of all the public documents involved. The quickest way to secure these documents and to ascertain the present status of a bill, is to see or write an education association official whose business it is to keep up with such matters. For a state bill, this official is the secretary of the state teachers' association (97). For a federal bill he is the legislative secretary of the National Education Association at Washington.

IV. LEGAL SOURCES OF VALUE TO WORKERS IN EDUCATION

1. *For the school law itself.*

Compilations or revisions of the school law (the school code) usually are issued by the state education department and mailed to the various schools in the state. You should know when such codes are made available, and if your school system does not receive a copy, write for one. Often the "school law" can be found in the public library or the library of an educational institution.

Session laws dealing with education ordinarily are not given out except on request. You need to know the practice in your state regarding such laws and make your request to the proper

authority or department. If you cannot get authoritative information on this matter, you usually can get help from the legal authority in the state department of education. Often the state teachers' association publishes or makes available copies of the session laws either in its journal or in separate mimeographed bulletins.

In case the foregoing procedures do not result in securing a copy of the education session laws, try to get a copy of the publication giving all laws passed by that session. Every legislative body issues such a publication and it of course covers education laws. It may appear in various forms, but the secretary of state in any state will tell you the particular form for that commonwealth.

2. *For the interpretation of the school law.*

As pointed out in Section II of this chapter, finding the interpretation of the law is really a job for one who has had legal training. However, sources and helps for novices can be found in Edwards (119) or Hicks (120).

3. *Formulations of principles of school law.*

a. Encyclopedias. Two legal encyclopedias will be helpful to one seeking general principles of school law:

Call
Number

111. *Corpus Juris*. Vol. 56. New York: American Law Book Company, 1932, under the heading Schools and School Districts, pp. 139-861.

112. *Ruling Case Law*. Vols. 1-28, with supplement. Northport, New York: Edward Thompson Company, 1920, under topic Schools in Volume 24.

b. Textbooks on school law. Two textbooks on school law will be very helpful:

Call
Number

113. Edwards, Newton. *The Courts and the Public Schools*. Chicago: University of Chicago Press, 1933. 591 p.

114. Trusler, Harry R. *Essentials of School Law*. Milwaukee: Bruce Publishing Company, 1927. 478 p.

4. *News notes on school law.*

Many professional journals contain departments devoted to school law. Among the best known of these are the American School Board Journal, Journal of the National Education Association, and School Life.

From January, 1932 to July, 1934, Dr. M. M. Chambers of Ohio State University issued a bi-monthly journal called Educational Law and Administration, devoted entirely to discussions of school law. It has been temporarily discontinued, with two issues for 1935 and regular schedule to be resumed in 1936.

To locate discussions of school law or phases of law closely related to school affairs in legal periodicals, use these indexes:

Call
Number

115. Up to 1899—Jones Index to Legal Periodicals, in two volumes (6 : 14).
116. From 1898 to 1908—Chipman's Index to Legal Periodical Literature (6 : 14).
From 1898 to date—Index to Legal Periodicals and Law Library Journal (52).

5. *Digests of court decisions on school law.*

A convenient digest of school law decisions by the higher courts of the various states (during the years concerned) will be found in the following yearbooks issued by Professor Chambers:

Call
Number

117. The First Yearbook of School Law. Columbus, Ohio: M. M. Chambers, Ohio State University, 1933. 106 p.
118. The Second Yearbook of School Law. Columbus, Ohio: M. M. Chambers, Ohio State University, 1934. 100 p.
The Third Yearbook in this series is scheduled to appear in the first half of 1935.

6. *Legal dictionaries.*

Legal dictionaries are seldom found in reference rooms of general libraries but can be found in any law library and in some law offices. You should have such a dictionary available before beginning any intensive legal research. The best known legal dictionary is Bouvier (6 : 105).

7. *Enactment of legislation.*

Call

Number

- 118a. United States Congress. Senate. Enactment of a Law. 73d Congress, 2d Session, Senate Document No. 155. Washington: Government Printing Office, 1934. 12 p. Free.

Good brief "history of the legislative proceedings of Congress in connection with the passage of a Senate bill from its introduction through the various parliamentary stages until its enactment into law."

- 118b. California State Department of Education. The California Legislature. State of California, Department of Education Bulletin No. 3, February 1, 1935. Sacramento, Calif.: The Department, 1935. 51 p. Free.

Excellent popular treatment, useful to teachers and pupils, of how "the people translate their wishes into law through their duly elected representatives." Noteworthy for showing how various social forces outside the legislature participate in the process. Specimen pages of documents issued at various stages in the history of a bill.

8. *References for further study*, already referred to:

Call

Number

119. Edwards, Newton. "Methods and Materials of Legal Research." *Review of Educational Research*, 4 : 85-91, February, 1934.
120. Hicks, F. C. *Materials and Methods of Legal Research with Bibliographical Manual*. Rochester, N. Y.: Lawyers Co-operative Publishing Company, 1923. 626 p.
- Mudge (6 : 104-113) will give various reference books on school law.

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For valuable *practice* in looking up the legal aspects of any educational matter, use Number 20 of the Alexander Library Exercises. This will give you experience in finding general principles of educational law, statutes covering a school problem, and recent and prospective legislation affecting your major field.

CHAPTER XXI

HISTORY OF AN EDUCATIONAL PROBLEM OR TOPIC

I. WHEN THE HISTORY OF A PROBLEM IS NEEDED

TO DEAL effectively with any educational problem, either theoretically or practically, you should know something of its history. For this statement, there are two strong reasons. First, *you cannot have a real understanding of any matter without knowing the main features of its evolution* or development. Relationships are what give you such understanding and they are best grasped by going back to a simple form of the matter and tracing its development into more complex forms. This is the reason why mere present-status studies are so unsatisfactory and why the recommendations based on them are so often futile.

For example, take any of the numerous problems connected with the many thousands of small and inefficient school districts. Authorities on school administration have for generations inveighed against such districts, but the people in them and the politicians resist attempts at betterment. It is impossible to understand this attitude without knowing something of the origin of the district system in Massachusetts and its spread to other parts of the country. A great educational administration tragedy is the fact that while Massachusetts was progressing to the point of getting rid of this organization, former Massachusetts residents were busily "plastering" it on newer states to which they had migrated. Only one who knows this can soundly appraise proposals for suddenly abolishing or reorganizing small districts in his state.

Second, *it is impossible to make sound recommendations for education for the people of any area without sufficient conformity to their native characteristics, institutions, and economic condi-*

tions. Only the history of these people and of the matters concerned can give one the slightest hope of attaining such conformity. The districting example in the preceding paragraph is a good illustration of this point as well. State control features of education afford another illustration. For instance, the states of New York and Louisiana have highly centralized state departments of education. This kind of state department is not found in Massachusetts with its long growth along the line of large local control of schools. Again, school administrative adjustments for Negroes cannot possibly be the same in all the states in view of their different histories of educational development.

To the practical schoolman in particular, a working knowledge of the history of education in the field of his problem is very helpful. Such knowledge greatly aids him to bring about desirable changes. By showing that current practice originated in attempts to meet the needs of the past, he can often persuade others to consider accepting his recommended changes to meet the needs of the present. Such knowledge also equips him to do a much better job on three things he must do all the time—evaluate current practice, predict trends, and try to avoid mistakes.

The educational researcher needs to know the history of matters connected with his problem as a protection against discovering what has already been advanced or developed, and is readily accessible to an informed person. Research workers continually waste enormous amounts of time and energy in “discovering” the same procedures or the same information in every new generation.

The foregoing does not mean that you should work up from original sources the history of every educational problem of interest to you. But it does mean that you should not consider your thinking about any educational matter complete until you have become acquainted with the high spots in its historical development. These outstanding features are fairly easily located for most educational matters if one but knows the kinds of library materials that are likely to contain pertinent historical treatments.

II. HOW TO LOCATE A HISTORY OF ANY EDUCATIONAL MATTER

In working on any educational problem of importance, locate as soon as possible a brief historical treatment of it. You do not need to hunt an exhaustive history until you see whether the brief treatment will suffice for your purposes. The latter is usually sufficient in the stage when you are trying simply to get a bird's-eye view of the whole problem.

1. *Brief historical treatment.*

First try the Education Index (51), working backwards through the series. Look for the name of your field or problem as a main heading, with History as a subhead. If this search does not turn up anything that is satisfactory, try the following procedures:

If your problem concerns a rather wide field, you may expect at least a few paragraphs treating it historically, in any encyclopedia article covering the area. You may, of course, count on histories of education to turn up, through their indexes, sections dealing with the topic. Any college or university textbook in education dealing with the subject is likely to have a historical section or chapter.

If your problem is a narrow one, e.g., a dissertation, a history of it is likely to appear as one of the chapters of a pertinent doctor's dissertation. This study will be cataloged the same as any book, or it may be run down under the directions for locating researches in Chapter XXIII. You may find scattered paragraphs on a narrow problem, or even a short treatment of it, by consulting the indexes to the general textbooks on the history of education. The value of these texts depends somewhat on their recency. If your problem is very recent, a general treatment of its field may give you quickly what you wish. For example, before one saw the Thirty-third Yearbook of the National Society for the Study of Education, Part II, "The Activity Movement," he could have expected this yearbook to contain a history of activity schools. It has a chapter entitled The History of Activism.

2. *Extensive historical treatment.*

If the field of your problem is of sufficient importance, there may be a separate history of it, which will be cataloged the same as any book (see Chapter X, Section I). This is the case with such fields as elementary education, secondary education, training of teachers, and the like.

If your problem is a narrow one, there is little likelihood of your finding an exhaustive history of it unless a dissertation has been devoted to its historical aspects. In most cases the best you can hope on such a problem is a historical chapter in some pertinent dissertation.

3. *Bringing a history up to date.*

The easiest procedure for bringing a history up to date is that for dealing with news items, treated in Chapter XXV. The material for this latter chapter will also be valuable for running down news items about past conditions. If a regular historical treatment of the matter cannot be found elsewhere, sometimes a comparison between such items in different years will show trends in a way to give fairly quickly a historical setting. Such a setting is of course far from any thorough history of the matter, but it may be sufficient for sketching the needed background.

III. WORKING UP THE HISTORY OF A MATTER

In case all the foregoing do not give you sufficient historical material for your purposes, you will have to work up the history yourself. This requires special knowledges and skills far beyond the province of this book. Little success can be expected in such work unless you have had a course in historical methods, have used them in history of education courses, or have had an opportunity to master them by independent study. If you have not had preparation in any of these, and must work up a historical chapter in a dissertation, the only alternative is to enroll in some history or history of education course and write your term paper on the historical phases of your problem. If this is not possible, about the only thing you can do is to get some dissertations that have been pronounced satisfactory on their historical chapters

and study them carefully in connection with the references given in the next section. The bibliographies of these references will suggest plenty of additional readings.

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For *practice* on sources for the history of an educational problem, use Number 21 of the Alexander Library Exercises. It will be best to take some problem whose evolution you really need to know.

IV. REFERENCES FOR FURTHER READING

For the following references and annotations, with the exception of the first, the writer is indebted to Professor Erling M. Hunt of Teachers College, Columbia University.

Call
Number

121. Abelson, Harold H. *The Art of Educational Research*, p. 85-105. Yonkers, N. Y.: The World Book Company, 1933.

Contains a brief discussion of the technique of historical research and cites a good bibliography for one who wants to master the technique.

Almack's *Research and Thesis Writing* (23).

Chapter X, p. 172-201, is a brief but competent discussion of *The Historical Method*; highly condensed but cites valuable references. This work is more concerned with the special field of education than the later ones cited in this list.

Hockett's *Introduction to Research in American History* (34).

Detailed and specific suggestions in regard to the locating of materials (catalogs, indexes, bibliographies, etc.), note-taking, critical evaluation of data, and composition (outline, footnotes, bibliography, style).

Excellent bibliography covering works on historical method and aids to research in American history. No special attention to education.

122. Nevins, Allan. *Masters' Essays in History: A Manual of Instructions and Suggestions*. New York: Columbia University Press, 1930. 24 p.

A highly condensed survey of much of the material covered in Hockett. Lists outstanding guides to European and

Call
Number

world history as well as American. No special attention to education.

123. Spahr, Walter E. and Swenson, Rinehart J. *Methods and Status of Scientific Research with Particular Application to the Social Sciences*. New York and London: Harper and Brothers, 1930. xxi+533 p.

An elaborate treatment of principles of critical scholarship, research techniques, and the present status of research in the social sciences. Includes discussions of the qualities and aptitudes demanded of the scholar; the use of a law library; details of composition; and questions of plagiarism, copyright, and publication, as well as full treatments of topics covered by Hockett and Nevins. There are no bibliographies either for the volume as a whole or for the separate chapters, but the footnote citations are suggestive. No special attention to education.

CHAPTER XXII

TEXTBOOKS

I. VALUE OF KNOWING HOW TO LOCATE AND EVALUATE TEXTBOOKS

AS LONG as textbooks are used in school work, educators need to know how to locate and evaluate them. In some states, school executives are required by law to assume responsibility for doing so. In others, they are in duty bound to recommend the best textbooks to their local boards of education for adoption. Even when they have adequate facilities for local curriculum construction, they must know how to find outstanding textbooks. They must know the best texts in their fields of specialization. They must be able to utilize the finest work of others, so often embodied in textbooks. Often, they will not be able to prepare promptly local courses of study in all subjects. Even if they could, they would frequently wish to supplement their efforts by excellent texts.

Despite such need for knowing about textbooks, much very superficial and shoddy work has been done in selecting them. Often this unsatisfactory result could have been avoided if the school people had only known where to get quickly lists of possible texts, and methods of evaluating these books. This chapter shows how to secure both speedily.

For *the research worker in education*, the same information is highly valuable. Whenever he wishes to know what was taught, what is taught, or what is likely to be taught in the future, for a given field, the textbooks actually used in that area at the time of interest furnish about the surest evidence.

II. LOCATING RECENT TEXTBOOKS

For *quickly securing a list of recent textbooks* for public schools (elementary and high), the American Educational Catalog (124)

is a convenient source. It does not cover all texts, it does not give full data on each text, and it is not always accurate. For what it does cover, however, it is very convenient. It began about 1872 and in recent years each annual issue has usually had a list of new texts classified by subjects. Each entry gives the publisher, author, title, and price. It is impossible to tell when the book was published except from the number of the catalog containing its entry. The 1932 edition had a list of texts in current use, alphabetically by authors, but the dates of publication were not given. The 1933 edition covered only new books from 1931 to the summer of 1933, classified by subjects, but again no dates were given except that the book must have appeared in the period covered by this number of the catalog. The 1934 edition gives only a list of texts in use, alphabetically by authors. It is useless for getting anything except the publisher and price, once you know the author. Finding the name of the author is of course the really hard part.

The textbook committee of the Society for Curriculum Study issued a similar list with brief annotations for this same period (128, 129), classified by subjects and giving full data except on price.

No such listing of recent *texts for college and university* classes has thus far been located. These texts, however, may be picked out of the indexes advised for searching in the second paragraph below. They will be given in a subdivision under Education or under the name of the subject, as Mathematics. Names of many new titles can be expected in School and Society and in The Junior College Journal. The Journal of Higher Education names those that it reviews.

For *supplementing the American Educational Catalog*, use educational periodicals covering the special field of interest for the required period. Thus, the Elementary School Journal in its department of Publications Received may be expected to list promptly most books of interest in elementary education. The list of periodicals given in Chapter XVII, Section III, may be used for finding likely periodicals for different fields. Any good book on a particular subject is excellent for locating the relevant

periodicals through its references. A glance down the references will quickly give the names of the periodicals.

For *exhaustive lists of recent textbooks*, the Cumulative Book Index (47) and the Publishers' Weekly (48) should be used. If full data are desired on a textbook and complete lists of texts in its field must be secured, this combination is much better than the American Educational Catalog. The combination is sure to include all educational texts issued in the period covered, and should be used by going backward in this order: All numbers of the Publishers' Weekly since the latest available Cumulative Book Index; all numbers of the Cumulative Book Index necessary to cover the period since its last annual volume; all annual volumes of the Cumulative Book Index going back to the last edition of the United States Catalog (45). This catalog will cover all textbooks then in print, and may not be recent enough for your purposes.

To secure a list of *all textbooks by any given author*, the latest author list of the American Educational Catalog is the most convenient one on elementary and high school texts for the authors and publishers that it covers. It is, however, by no means complete. In most cases, running backwards on the Publishers' Weekly, Cumulative Book Index, and United States Catalog combination described above will give a full list most quickly. Look under the author's name in each index. Any textbook author listed in any of the Who's Who books will give some of his publications there, but names of textbooks are often omitted in such cases. See Chapter XXIV, Section III.

III. HOW TO SECURE FULL BIBLIOGRAPHIC DATA ON A TEXTBOOK

You will frequently find data on a textbook that are not full enough for your purposes. The items most frequently lacking will be date of publication, number of pages, and price. For trade reasons, publishers do not circulate these items as much as they do other information about their texts. The Publishers' Weekly, Cumulative Book Index, United States Catalog combination described previously will give the desired information for any

book in the United States now in print. If you know the date of publication, you of course know just which number in the series to consult. If the date is lacking, approximate it as well as you can, and then look in the numbers of the indexes for that tentative date, just before and just afterward. The fullest bibliographic data in this series occur under an author entry. If the entry found under some subject heading is not full enough, look up the corresponding author entry in the same number of the index used.

IV. LOCATING OLD TEXTBOOKS

The United States Catalog of 1928 lists the books in print on January 1 of that year. This of course includes many old textbooks. For very old texts, consult the catalogs covering still earlier books, described in Mudge (6 : 287-288).

After the names of old textbooks are secured, locating the books themselves may be difficult. Any educational library in which you are working will be sure to have some of them, listed either in the regular library card catalog or in a special textbook catalog. Among libraries specializing in collections of old textbooks are the United States Office of Education, Teachers College (Columbia University), Harvard University, New York University, and the great American Antiquarian Society Library at Worcester, Massachusetts. A state library or the educational division of a state university library is almost certain to have extensive collections of old texts that were either published in that state or used in its schools. The rarest of these old textbooks may have to be used in the library owning them, but many of them may be borrowed through interlibrary loans (see Chapter XV).

V. EVALUATING TEXTBOOKS

The problem of evaluating textbooks comes up as soon as it is necessary to choose a text for a particular purpose. Usually numerous texts are available for this. Examining all of them is so very tedious and complicated that it is highly desirable to secure as early as possible a fairly short list of likely texts from which to make the final selection. Securing such a list is not child's play.

Many public school workers in their textbook selection seem to think they have only to go to some authority in the field and follow his recommendations. If good texts are to be secured, this procedure is far from simple. Suppose, for instance, that this method is recommended for adopting an arithmetic text. There are distinct schools of thought on teaching arithmetic, represented by different teacher-training institutions. Which institution is to be followed? Suppose it is decided to follow the institution in which the writer of this book is working. Over twenty series of arithmetic texts are issued by the faculty of that institution, many of them by members outside the departments of mathematics and elementary education. Sometimes different arithmetics are written by different members of the same department. If authority is to be followed, which of these authors is to be chosen, and why?

Such difficulties make advisable recourse to help in securing evaluations by more disinterested parties than the authors and publishers of textbooks. The chief *sources of help in such evaluations* will now be discussed.

1. *Treatments of problems involved.*

For reading on these, see references at the end of this chapter.

2. *Book reviews.*

Directions for locating these are given in Chapter XVII, Section III.

3. *Textbook adoptions.*

If a given textbook is adopted for use in a school system or higher educational institution of good repute, the fact of adoption is helpful in evaluating that book. Such adoption means that the school authorities involved presumably consider it a good book. Once you obtain the names of the systems or institutions using it, you may if necessary correspond with them to find their reasons for considering it good. This method of evaluation favors books that have been out some time, but it often is useful for more recent texts.

School systems usually issue lists of adopted textbooks for ele-

mentary and high schools, often in mimeographed form, free upon application. To get lists of good textbooks this way, it is necessary to choose good school systems to begin with. Higher institutions do not issue such lists.

Practically every publisher of school textbooks keeps a list of adoptions of each text issued by him. This list usually appears in a circular advertising that particular book. Lists of this nature are useful for evaluating texts for both school systems and higher institutions, once the names of possible texts have been secured in other ways. For securing such a list, consult your reference librarian.

4. *Score cards for rating textbooks.*

For thoroughly satisfactory results in evaluating textbooks, it is necessary to use some kind of score card, at least on the selected list from which the final choice for adoption is to be made. A good treatment of score cards for this purpose will be found in Reference 125, Chapter VIII by C. R. Maxwell. Other references on score cards for textbooks will be found in the bibliography in the same yearbook and in (126, 127). Some of the references cited by these two treatments cover score cards in individual subjects. Other specialized score cards may be expected in recent books on methods of teaching particular subjects.

5. *Society for Curriculum Study's bulletins.*

This organization has a special committee which has issued lists of textbooks with extremely brief annotations, for different subjects, covering elementary schools, high schools, and junior colleges, beginning with books published in 1931. It may develop into something of great worth for evaluating textbooks, if the annotations can be longer. For bulletins issued, see (128, 129).

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For *practice* in running down, selecting, and evaluating textbooks of interest to you, use Number 22 of the Alexander Library Exercises. This will give you valuable experience on texts for your major field and also a preparation for effective service on textbook committees.

VI. REFERENCES FOR FURTHER READING OR USE

For *names of current textbooks* for public schools and education courses, use:

Call
Number

124. American Educational Catalog. New York: Publishers' Weekly. Annual, 1872—. Described in Section II of this chapter.

For a *good treatment of most important problems* connected with textbooks, see:

Call
Number

125. National Society for the Study of Education. The Textbook in American Education. Thirtieth Yearbook, Part II. Bloomington, Ill.: Public School Publishing Company, 1931. 323 p.
The bibliography has 91 selected and well-annotated references. It may be brought up to date by looking under the heading of Textbooks in the Education Index (51).

For *references on evaluating textbooks*, see the sections with pertinent references, by Henry Harap, in:

Call
Number

126. Review of Educational Research, I : 44-45, January, 1931.
127. Review of Educational Research, IV : 196-98, April, 1934.

For *brief annotations of current texts*, the textbook committee of the Society for Curriculum Study has issued these:

Call
Number

128. Elementary Textbooks of 1931-33. News Bulletin, Vol. 5, No. 2, February 12, 1934. 16 p. 25c.
129. Secondary and Junior College Textbooks of 1931-33. News Bulletin, Vol. 5, No. 3. 76 p. 75c.
These bulletins may be obtained at the prices named plus postage, from the Society's executive chairman, Professor Henry Harap, Western Reserve University, Cleveland, Ohio. The textbook committee expects to issue similar bulletins in the future.

CHAPTER XXIII

EDUCATIONAL RESEARCHES

I. NEED OF KNOWING HOW TO LOCATE EDUCATIONAL RESEARCHES

UNLESS the *research worker* is familiar with the investigations of others on his problems, he cannot really know what his own findings mean, and he runs grave danger of needlessly duplicating previous studies. In many instances, also, he can most advantageously plan his own procedures only after he has examined how other workers have investigated the same or related problems. The chief reason for these values is that accounts of true research give knowledge of facts or insight into relationships, not previously available. Opinions and definitions of research differ greatly but they all stress this uniqueness. Furthermore, the evidential basis of all good research gives to its findings a validity not possible for writings based only on the wishes, convictions, personal opinions, or biases of their authors. A good educational investigation consequently gives the soundest basis available for thought or action on its problem. Far from all educational researches measure up to such standards. Many of them do, but they occur in the same lists as the poor ones. To gain access to the good ones, you need to know how to locate all kinds.

Without looking into educational researches, the *practical schoolman*, on many of his difficulties, has little chance of adopting sound procedures or policies.

II. HANDICAPS IN LOCATING EDUCATIONAL RESEARCHES

Valuable as educational researches are for educators, *locating all the important pertinent studies on any problem* is one of the most difficult undertakings in library searching. To begin with,

immense numbers of such studies appear yearly. The Review of Educational Research, for example, will list around 2,500 studies annually (see Chapter XIV, Section III). Moreover, it enters only selected items and covers only a third of its full program in one year. Another difficulty is that any available general or specialized bibliography of researches on an educational problem is likely to be very incomplete. Again, many educational researches are not published and hence can be examined only at considerable expense of time and money. Abstracts of such unpublished studies are often very unsatisfactory, especially to research workers.

These difficulties bid fair to continue with little abatement unless the plan of the United States Office of Education goes far beyond anything so far attained. This plan is to serve as a collecting and lending agency for all educational theses and dissertations (see Chapter XV, Section II). Even this plan if successful would not take care of many studies not submitted in connection with university degree requirements. For possibilities at the Library of Congress, see last part of Section I of Chapter XV preceding.

III. LISTS OF EDUCATIONAL RESEARCHES

For the years since 1920, by far the *most convenient general list* is a combination of the Education Index (51) and the Ohio File (70). The Education Index began January 1, 1929 and many of its headings have a subhead of Research. From about 1920 through 1928, the Ohio File covers researches in much the same way. This file is available only at the Bureau of Educational Research at Teachers College of Ohio State University, and at Teachers College, Columbia University. Since 1928, the Ohio File covers items not listed in the Education Index.

For *reviews and bibliographies of outstanding educational researches*, canvass the Review of Educational Research, described in Section III of Chapter XIV.

The various educational research lists of the United States Office of Education and of the National Education Association are valuable. For descriptions, see (130 : 335-336).

The numbers in the general research series of the United States Office of Education, so far issued, are:

1927-28; Bulletin, 1929, No. 36
1928-29; Bulletin, 1930, No. 23
1929-30; Bulletin, 1931, No. 13
1930-31; Bulletin, 1932, No. 16
1931-32; Bulletin, 1933, No. 6
1932-33; Bulletin, 1934, No. 7
1933-34; Bulletin, 1935, No. 5

In addition, Circulars Nos. 18 and 42 listed educational research studies in school systems several years ago. Circular No. 44 did the same for state departments of education and state education associations for 1930-1931. If later numbers are issued, they may be picked up through the Education Index (51), under the heading of Research, Educational, with subhead of Bibliography. Entries in such series of the United States Office of Education are usually briefly annotated.

The Research Bulletins of the National Education Association are listed in Chapter XIV, Section II. At the end of each year an extensive index for the period is issued and will be found in any library bound volume of this Bulletin. Later numbers may be located through the Education Index.

For *educational researches* published in *periodicals*, the Education Index (51) and the Ohio File (70) are good from 1920 on, particularly from the time the former started, January 1, 1929. Before 1929, from 1907, the International Index (54) and its predecessor, the Readers' Guide Supplement (61), perform a similar service.

Lists of *educational researches under way*, by Carter V. Good, appear in the Journal of Educational Research for January of each year, beginning in 1931. Once the name of the author of a research is found in this way, the Education Index (51) can be used to see if it was ever published.

Lists of *doctoral dissertations and masters' theses* in education are of enough importance to warrant separate treatment in Section IV following.

Educational researches in a specialized field may be listed in sections of all the foregoing, traceable through the headings or indexes. They are very likely to be noted in the periodicals de-

voted to that field. The research bulletins of the National Education Association may have one or more numbers emphasizing this field. See list of these bulletins in Chapter XIV, Section II. Later ones will be noted in the Education Index (51) in connection with the name of the field. While these bulletins are not altogether research ones, they often give bibliographies and footnote citations that list many pertinent researches. If the field has any special library index, that aid should of course be consulted. Examples of such special helps are Biological Abstracts (6:142), Industrial Arts Index (53), and Agricultural Index (49).

IV. DOCTORAL DISSERTATIONS IN EDUCATION

Beginning in 1912, the Library of Congress has issued an annual list of *American doctoral dissertations* that were printed (133). The volume is usually two years late in appearance. It includes all fields, but the items dealing with education can be located through the author and subject indexes. It has brief annotations. In using any volume, be sure to look in the supplementary list, which will give the latest items.

The Library of Congress lists have been very inadequate because they do not cover *unpublished dissertations*, so other lists have been issued by other agencies. Beginning with 1934, the H. W. Wilson Company issues an annual list of American doctoral dissertations, classified under large subject divisions, of which Education, without subdivisions, is one. There is an author index. The first number of this series is listed at the end of this chapter (134). For tracing unpublished dissertations prior to 1934, see pages iii-iv of this Wilson list for 1934.

For *educational dissertations*, beginning with January, 1917, there was an approximately annual list issued in mimeographed form by the University of Illinois Research Bureau, compiled by Walter S. Monroe. The items were issued in a collected form covering January, 1917, to October, 1927, in Monroe (132). Beginning with 1928, the lists of the United States Office of Education, noted in Section III preceding, have continued the work. All these lists include more than dissertations.

The Carter V. Good lists in the *Journal of Educational Research*

are available from 1931 on, for *educational researches under way*. See also last paragraph of Section III of this chapter.

V. AVOIDING DUPLICATION OF PREVIOUS RESEARCH

A primary desire of every educational research worker is to *avoid duplicating previous work*. He does not wish to make unnecessary effort nor to be labeled as ignorant of what has been done before. Consequently the demand for some clear and sure method of avoiding such duplication is insistent. Unfortunately, there is at present no such way.

In the first place, none of the lists of researches previously noted is anything like complete. For various reasons, important researches will be omitted from any such publication. It could not be otherwise with the numbers of educational researches and the variety of forms and places of publication. It is especially true of the unpublished studies. The only sound procedure for an educational researcher is to take all possible precautions and exhaust all likely sources.

Not all duplications, however, are *regarded with equal seriousness*. In many studies, while duplication is to be avoided, if the worker later finds that he has unwittingly duplicated, he is not unduly embarrassed. The case of a doctoral dissertation is otherwise. The writer of such a dissertation is expected to avoid duplication at all costs. His major professor will protect him all that an instructor can, but the student has to take full responsibility for knowing about all earlier researches in the field. No matter what the stage of the work, the degree cannot be granted if the dissertation is found to duplicate seriously any previously published work.

The best way *to avoid duplicating a doctoral dissertation* is to exhaust all the sources given in this chapter. In addition, it is well to go through the lists of dissertations at all institutions specializing in that particular field. Thus one would expect the University of Iowa to have dissertations in elementary education and child study in large numbers. Similar expectations would be justified for the University of Southern California on commercial education; for Teachers College (Columbia University) on educational

finance and buildings; for the University of Chicago on studies of reading. A list of such institutions cannot be published, but some member of the faculty where the student is working will be able to suggest the institution likely to have worked on the problem of the student's dissertation. These institutions can then be noted and their dissertation lists combed with the help of the suggestions in Derring (131). It is also well to be sure that the canvass has covered any special lists of researches in the field, such as the ones in secondary education issued by the United States Office of Education.

In any exhaustive searching to avoid duplication, it pays to *go backwards from the most recent researches*. These in their bibliographies and footnote references are sure to cite earlier studies in the same field that might otherwise be missed.

For *practice* in locating educational researches on a problem of interest to you, use Number 23 of the Alexander Library Exercises. This exercise should be done by every user of this book who wishes to undertake his first educational research. It will be valuable as well for many experienced research workers.

VI. ADDITIONAL REFERENCES USEFUL IN LOCATING EDUCATIONAL RESEARCHES

For *additional information and checking items* to use in finding research in education completed or under way, consult:

Call
Number

130. Witmer, Eleanor M. "Educational Research. A Bibliography of Sources Useful in Determining Research Completed or Under Way." Teachers College Record, 33 : 335-340, January, 1932.

For locating lists of researches at any one institution and *abstracts* of researches not immediately accessible, use:

Call
Number

131. Derring, Clara E. "Lists and Abstracts of Masters' and Doctors' Dissertations in Education." Teachers College Record, 34 : 490-502, March, 1933.

For a detailed discussion of the various *indexes available before 1929*, see Mudge (6) under the headings of Bibliography, Debates, Dissertations, Essays, and Periodicals.

For *bibliography of a particular subject*, use the references of Chapter XI, Section 1, and Mudge (6-9), in each case looking under that subject in the index.

For the most convenient listing of *educational researches from 1918 to 1927*, consult:

Call
Number

132. Monroe, Walter S. Ten Years of Educational Research, 1918-1927. University of Illinois, Bureau of Educational Research, Bulletin No. 42, August, 1928. Urbana, Ill.: University of Illinois, 1928. 377 p.

Lists by author and topical index 3,650 reports of educational research and related materials for the ten-year period. Gives a complete list of doctors of philosophy in education by institutions, 1918-1927.

For names of *doctoral dissertations* that have been *printed*, see:

Call
Number

133. United States. Library of Congress. A List of American Doctoral Dissertations Printed in 1931 (for example). Washington: Government Printing Office, 1933. Annual from 1912—.

Described at beginning of Section IV of this chapter.

For locating *all dissertations from 1933 on*, the Wilson Company annual *list* promises to be most helpful and prompt. The one for 1933-1934 appeared in October, 1934, full data for it being:

Call
Number

134. Gilchrist, Donald B. Doctoral Dissertations Accepted by American Universities, 1933-34 (Number 1). Compiled for the National Research Council and the American Council of Learned Societies by the Association of Research Libraries. New York: H. W. Wilson Company, 1934. 98 p.

Described in second paragraph of Section IV preceding.

CHAPTER XXIV

NAMES, ADDRESSES, AND INFORMATION ABOUT INDIVIDUALS

I. ADVANTAGES OF KNOWING HOW TO LOCATE INFORMATION ABOUT INDIVIDUALS

THE *educator who aspires to advance professionally* must know how to secure quickly accurate information about individuals who might contribute to his advancement. For illustration, if he is applying for a position and addresses a letter to a mere title, e.g., "Superintendent of Schools," or to the former executive, his communication has little chance of getting beyond the present superintendent's secretary. If he misspells the name of the superintendent or uses a wrong title, the recipient is likely to note such carelessness. Moreover, he will find it much easier to get acquainted with others, and make a good impression upon them, if he knows how to locate biographical information about them beforehand. For the young man entering the profession, biographical data on men who have reached eminence in his line will guide him in his own professional advancement.

If one knows how to locate the right person for supplying any particular information, he will get that information much more quickly and accurately than if he blundered around because of ignorance. In writing a business firm, his letter correctly addressed for street number to the city having the nearest branch of the company, will bring a reply days earlier than if he had sent out his communication on a guess. Accurate addressing is even more important for speed in dealing with government officials or in communicating with distant specialists.

Much the same needs hold for the *researcher in education*, especially whenever he needs to interview or write authorities on sources, send out a questionnaire, or use a jury.

II. HOW TO LOCATE SOURCES OF INFORMATION
ON INDIVIDUALS*Essential skill needed.*

So many sources are available for securing names, addresses, and biographical data, and so many new sources come out every year, that it is futile to try to remember them all. If a person relied upon memory alone, the sources might soon be out of date or replaced by other sources that would give the desired information much more accurately, quickly, and fully. *The essential skill to be mastered is that of knowing how to locate the most recent sources available.* This does not imply that a person should fail to familiarize himself with the sources most useful to him at the present time. It does imply that he should be alert to new sources which will serve his needs even better than those now available.

Terminology.

A list of names is usually called a *directory*. It should be noted, however, that many directories contain as much biographical data as publications called biographical cyclopedias. Biographical cyclopedia, biographical dictionary, and Who's Who are often used as interchangeable terms. Often biographical dictionaries and Who's Who's are classified under biographical cyclopedia. Therefore, this discussion uses the term *brief biographies* to include all three terms. Such brief biographies are to be found for both the living and the dead, the Who's Who books covering only the living. The foregoing do not include other sources of biographical data such as encyclopedia articles, periodical articles, news items, autobiographies, biographies, collections of short biographies or brief sketches found in books, especially on history.

Advance planning.

Before beginning to look for data about individuals, determine where you can best seek the information. Names and addresses only can, of course, best be found in a directory. Biographical information on contemporary leaders is most likely to appear in some kind of Who's Who. For information on leaders, say in

education, see if there is a Who's Who for that particular field. If you wish data on a deceased person who was outstanding in his contribution to civilization, you can expect an article on him in any good encyclopedia. If you need facts about a person conspicuous in contemporary life who does not have the qualifications for inclusion in a Who's Who, you can count on finding periodical articles or news items about him if you know where to look. For those who have played major rôles in various phases of our culture, you can depend upon finding autobiographies, biographies, or biographical sketches in some collection or in a long dictionary such as the Dictionary of American Biography (137) described in Section III, 1 following. For brief accounts of those who have played a part in the history of any movement, consult an historical treatment of that movement.

Locating up-to-date directories.

As directories soon are out of date, seek the latest one available. The reference room of whatever library you are using probably segregates its directories and lists them under the head of Directories in the general card catalog. It may have a separate card file for its directories. For the year 1930-1931, Public Affairs Information Service (59) issued a separate list of directories then available. Probably the most complete list of current directories in all fields is to be found in the current issues of that service so that these issues should be used for keeping up to date. For the most recent educational directories, see the Education Index (51). Both Service and Index use the heading Directories. Directories published in book form can be located under the same head in the United States Catalog (45), United States Catalog Supplement (46), Cumulative Book Index (47), and Publishers' Weekly (48).

Locating brief biographies.

Since the distinction between biographical dictionaries, encyclopedias, and Who's Who's is not clear, seek brief biographies under all three headings in whatever index you are using. The United States Catalog (45), United States Catalog Supplement (46), Cumulative Book Index (47), and Publishers' Weekly (48) will

list most of the available sources for brief biographies under the heading Biographical Dictionaries, or Biography. A library catalog usually includes such biographies under the heading Biographical Cyclopedias. You may, however, find still others under the catalog heading of Who's Who since some will be classified there because of their titles rather than under a general heading. For such books in education, look under Who's Who as a heading in the Education Index.

For a Who's Who in a particular field, look under the field, e.g., Mathematics, with a subhead of Biography, in the United States Catalog series listed in the preceding paragraph. Although not always useful for the most recent books, Mudge (6-9) is valuable for locating many biographical books in special fields in this country and abroad.

Locating other sources of biographical data.

The following chapters in this book will be useful for the respective purposes: Periodical articles, Chapters X and XI; news items, Chapter XXV; books and sketches in books, Chapters X and XI; accounts in histories, Chapter XXI.

Using a suitable reference book.

In using any suitable reference book, you can find and understand the information much more readily if you note three things:

1. Qualifications necessary for inclusion. Does the book cover both the living and the dead or is it confined to only one of these classes? Does it have restrictions such as geographical, occupational, or other which would preclude the type of person about whom you are seeking information?

2. The particular kinds of information included. Some books give only names and addresses, while others include mention of honors, names of publications, religious, political, and other affiliations.

3. Distinctive characteristics of the book that are necessary to use it quickly. For example, abbreviations and cross references.

III. SPECIFIC SOURCES

1. *General, including educators.*

The sources that are noted below are usually available in libraries.

Call
Number

135. Who's Who. London: Black; New York: The Macmillan Company, 1849—.

Issued annually. Contains brief biographies of contemporary English leaders and of a few outstanding ones on the European continent. This Who's Who set the pattern for those described elsewhere in this document. It gives names, addresses, education, affiliations, published works, and such other personal notes as the person is willing to supply.

136. Who's Who in America. Chicago: Marquis, 1899—.

Does biennially for America what Who's Who does for England. In addition to biographical data, it contains a geographical index. Government officials are included only while they are in office unless they possess other qualifications for inclusion.

137. Dictionary of American Biography. New York: Charles Scribner's Sons, 1928—.

A comprehensive work similar to the English Dictionary of National Biography. Beginning in 1928, separate volumes have been issued in alphabetical order. At this date, February, 1935, it has gone as far as Roderdau. It is the most reliable source of brief biographies of deceased American leaders.

- 137a. An Analytical Bibliography of Universal Collected Biography Comprising Books Published in the English Tongue in Great Britain and Ireland, America, and the British Dominions. Phyllis M. Riches, Compiler. London: The Library Association, Chaucer House, Malet Place, London, W.C.1, 1934. 709 p.

Very complete on listing items only.

Alphabetical index by person, book index, chronological table, index by callings or professions, and alphabetical index of dictionaries and biographical directories.

For other useful sources for general fields, consult Mudge (6) under the heading of Bibliography.

2. *Educational.*

Sources of information in this field necessarily tend to be somewhat closely specialized.

a. Biographical. For *prominent educators*, consult:

Call

Number

138. *Leaders in Education*, 1st ed. J. M. Cattell, Editor. New York: Science Press, 1932. 1037 p.

Brief biographies of over 11,000 American educators—name, title, address (1932), place and date of birth, education and degrees, positions held, honors, society membership, activities and publications. It does not include all leaders in education. Later editions contemplated.

For *minor educators*, see:

Call

Number

139. *Who's Who in American Education*. New York: The Robert C. Cook Company, 1928—.

Most recent brief biographies of American educators including name, title, address, place and date of birth, education and degrees, experience, honors, society membership, professional activities and publications, and pictures. It is not always accurate in the mechanical features and does not include all leaders in education. Some portraits in recent editions.

See also under *higher education* following.

Call

Number

140. *Who's Who in Education; A Biographical Directory of the Teaching Profession*. George E. Bowman and Nellie C. Ryan, Editors. Greeley, Colo.: *Who's Who in Education*, 1927. 180 p.

Includes "about 2,500 biographies including about half the state superintendents, some 300 college and university presidents and deans, heads of departments, superintendents, principals, and worthy classroom teachers."

For *higher education*, the following are useful:

Call

Number

141. *Presidents of American Colleges and Universities*, New York: The Robert C. Cook Company, 1933—.

236 SPECIAL SOURCES AND TECHNIQUES

Call
Number

Includes biographical data on nearly all of the administrative heads of institutions of higher learning in the United States. In addition to the usual data it includes facts regarding occupation of father, ancestry, and hobbies or recreation. Triennial.

For biographical information on names not included in the general or national reference books, the *publications of certain colleges and universities* may be useful. These may include biographical registers, directories, general catalogs, or alumni lists of a particular college. These are not limited to important people but often include all former college students. Examples of institutions publishing such lists are Dartmouth, Gettysburg, Michigan, Rutgers, Swarthmore, and Yale in America; Cambridge and Oxford Universities in England. Many of these are listed in Mudge (6) under the heading of Biography. A complete list of such biographical directories is in preparation by Professor Isadore G. Mudge of the Columbia University Library.

For sources of brief biographies in *special fields of education* see Mudge (6) under the heading of Biography, subheading Education. Two such books of particular importance in this connection are:

Call
Number

142. Rus; a Biographical Register of Rural Leadership in the United States and Canada. 4th ed. L. H. Bailey and Ethel Zoe Bailey, Compilers. Ithaca, N. Y., 1930. 769 p.

"The staffs of colleges of agriculture and of experiment stations have been included above the grade of Instructor or its equivalent, in case the title indicates that the person is engaged in the agricultural side of the work."

143. A Handbook for Private School Teachers. By Porter Sargent. Boston, Mass.: Porter Sargent, 1930. 797 p.

Includes "all who are permanently giving time or interest to education not supported by taxation, omitting those interested only in public and normal school, college and university education. This includes the living, active and resigned—." Gives "name, parentage, education, career, subject and specialties, membership in clubs, associations, religious organizations; recreations and hobbies."

b. Names and addresses. For *administrators and executives* primarily, use:

Call
Number

144. United States Office of Education. Educational Directory. Washington: Government Printing Office, 1912—.

This is probably the most widely used educational directory available. It includes the names and addresses of personnel in the United States Office; of principal state school officers; county and other local superintendents of schools; superintendents of public schools in cities and towns; public school business managers; superintendents of Catholic parochial schools; names of presidents of colleges and universities; heads of departments of education; presidents or deans of professional schools and institutions for the training of teachers; executive officers of state library commissions; library schools; state library associations; educational boards and foundations; church educational boards; Jewish educational organizations; international educational associations and foundations; American associations (educational, civic, and learned); National Congress of Parents and Teachers; directors of educational research; and educational periodicals.

This directory is issued annually as Bulletin Number 1 of the United States Office of Education. In recent years it has appeared in parts which are later bound together in a whole.

145. Patterson's American Educational Directory. Homer L. Patterson, Compiler and Editor. Chicago: American Education Company, 1904—.

This directory includes private schools as well as public and so lists more positions than the United States Office of Education Directory. It has the advantage of listing together all the names it covers for one community, under the name of that community. It also has an educational business directory.

For *men* only:

Call
Number

146. Phi Delta Kappa Directory. Chicago: The Phi Delta Kappa Educational Fraternity, 1931. 409 p.

Covers thousands of men not otherwise easily traceable. It gives degrees and institutions attended up to that date.

238 SPECIAL SOURCES AND TECHNIQUES

For *association membership lists*:

Write the secretary of the association, if such a list has not been published in the bulletin of the association or as a separate publication. If published in the bulletin, you can find it in the periodical index which covers that bulletin, under the name of the association as author. If it has been issued as a separate publication, it might be picked up by Public Affairs Information Service (59) or the Cumulative Book Index (47).

For *college and university graduates*, see Section III, 2, *a*, italic heading of "higher education" preceding in this chapter.

For *firms* dealing with schools, any number of the American School Board Journal or the Nation's Schools will have a classified list of firms advertising in that number. Much longer directories well classified and indexed, are:

Call
Number

147. School Supply and Equipment Directory. New York: School Management, Inc., 1934—.

148. American School and University; A Yearbook Devoted to the Design, Construction, Equipment, Utilization, and Maintenance of Educational Buildings and Grounds. New York: American School Publishing Corporation, 1928—.

Contains many drawings and pictures from photographs.

149. Sweet's Catalogue File (Architectural). New York: Sweet's Catalogue Service Division of F. W. Dodge Corporation, 1906—.

Consists of a uniform edition of manufacturers' catalogues containing numerous pictures such as these catalogues present to customers. Indexed for every probable use.

For *fraternities*, the following gives a brief history and the names of the chapters to date:

Call
Number

150. Baird's Manual of American College Fraternities, 12th and semi-centennial edition. F. W. Shepardson, Editor. Menasha, Wis.: Banta Publishing Company, 1930. xxii+734 p.

For *higher educational institutions*, see:

151. College Blue Book, 3d ed. By Huber W. Hurt. Hollywood-by-the-Sea, Fla.: College Blue Book, 1933. 588 p.

Call
Number

This widely used college directory contains lists of colleges, professional and technical schools, universities (world-wide), presidents or executive officials, and other data regarding the institutions, classified by states; has an index.

152. College Directory Including Special Schools. Vol. 1. Springfield, Ill.: L. K. Davis, 1928. 159 p.

153. American Universities and Colleges, 2d ed. rev. and enl. by John Henry MacCracken for the American Council on Education, Washington, D. C. Baltimore, Md.: Williams and Wilkins, 1932. 1066 p.

The first edition, 1928, was edited by Robertson and published by Charles Scribner's Sons, New York.

For *periodicals in education*, use:

154. Educational Press Association's Yearbooks. Washington, D. C.: Educational Press Association, Committee on Standards, 1926—.

Issued annually. Gives editors, publishers, number of issues a year, address, and price.

For *private schools*, use:

- 154a. A Handbook of Private Schools for American Boys and Girls. By Porter Sargent. Boston, Mass.: Porter Sargent, 1915—.

Contains a list of private schools arranged by states and towns, foreign schools accepting American boys and girls, schools classified as to type, summer camps, Who's Who in private schools, descriptive notes about schools, directories of interest to private schools, and an index.

For *state public schools*, state educational directories are issued annually by many state departments of education of late years, often in mimeographed form. They are valuable for locating the names of teachers, principals, presidents and clerks of boards of education, and other officials not included in the directory of the United States Office of Education (144). To locate recent issues of such directories, look under the heading of Directories in the Education Index (51) or Public Affairs Information Service (59).

3. *Non-educational, of interest to educators.*

This section gives only a few of those most valuable to educators. Others, particularly in the Who's Who's for various fields, can be located through Mudge (6-9).

a. Business firms and associations. *Lists of directories* by different businesses or industries appear in:

Call
Number

155. Wilcox, J. K. United States Reference Publications. Boston: F. W. Faxon Company, 1931. 96 p. Supplement, 1932, 135 p.

Clues for exhaustive searching for such directories will be found in:

156. Davis, Edwin W. "Guide to Occupational Studies." *Occupations—The Vocational Guidance Magazine*, 13:503-13, March, 1935.

Cities: Chamber of Commerce or City Directories are especially useful in locating business firms.

b. Government. Information in regard to *federal, state, and city officials* may be found in:

157. Official Congressional Directory for the Use of the U. S. Congress. Washington: Government Printing Office. Each session.

Lists executive officers, members of congress, governors of states, committees, commissions, courts, foreign and consular service, and personnel of other federal government agencies. Often it gives the duties of the various divisions and biographical data on those holding key positions.

158. United States. Congress. Biographical Directory of the American Congress, 1774-1927. Washington: Government Printing Office, 1928. 1740 p. (69th Congress, 2d Session, House Document 783).

9,000 biographical sketches, arranged alphabetically.

159. Who's Who in the Nation's Capital, 2d ed. Washington, D. C.: Ransdell, 810 Rhode Island Avenue, N. E., 1930. 860 p.

160. Who's Who in Government, Vol. I. New York: Biographical Research Bureau, 1930. 800 p. Supplement, 1931, 58 p.

Call
Number

State Manuals, described in Chapter XII, usually contain a directory of officials in the state government and its subdivisions with biographical data on important officials.

161. Municipal Index. New York: American City Magazine Publishing Corporation, 1924—.

Contains a directory of municipal officials.

c. Newspapers. For lists of *newspapers* and *persons* engaged in newspaper work, the following can be consulted:

162. American Newspaper Annual and Directory. Philadelphia: N. W. Ayer, 1880—.

Lists over 20,000 newspapers, periodicals, and other publications. It does not claim to be complete and purposely omits certain types of publications. It gives detailed information about each publication: Name, frequency, political bias, size, price, circulation, staff, and information about the places in which the publications are circulated or printed.

d. Periodicals. See Ayer (162), Severance (62), or Ulrich (63). The third of these lists about 6,000 foreign and domestic periodicals classified by subjects and gives title, date first published, frequency, publisher, size, price, and address.

e. Social work. The following is the recognized authority:

163. Social Work Yearbook. New York: Russell Sage Foundation, 1930—.

Contains a directory of public and private social welfare agencies. Biennial.

IV. LOCATING UP-TO-DATE REFERENCE BOOKS ON INDIVIDUALS

Libraries may not keep up to date on the various directories and reference books on persons. You may find an old publication and wish to have a later one. In addition to the directions given in Section I for directories, you have two possibilities. Any book of this type in its preface will have some statement indicating when future editions may be expected. Or you can consult your reference librarian.

V. LOCATING PREVIOUS EDITIONS OR ISSUES

For historical or trend studies you usually can find mention of previous editions or issues of a given directory in the preface of the last copy available. If you do not find it there, consult Mudge (6-9), or your reference librarian.

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For *practice* in securing valuable information about individuals, use Number 24 of the Alexander Library Exercises. This will equip you to find quickly data about individuals on the numerous occasions in your practical work or research when you need such information.

CHAPTER XXV

NEWS ITEMS

I. WHEN THE EDUCATOR NEEDS NEWS ITEMS

TO KEEP abreast of the times, educators constantly need *current news items* for use in curriculum and lesson planning, for biographical information about persons who "count" in their work, or for use in preparing speeches, popular articles, reports, and debates. Many persons engaged in educational research have similar needs. Such news items are particularly necessary for researches which deal with new developments, which attempt to make interpretations related to present-day conditions, or which undertake to bring the history of an educational interest up to date.

News items issued in the past are often useful for studying the history of anything. They can be selected and condensed to give vivid cross sections at important dates that show clearly the evolution of the matter treated. Such items are very important in most historical research, history teaching, or studies involving biographical information about prominent persons. Many a serious practical difficulty for the schoolman in the field would be simplified for him if he would take a rapid run through news items on the problem over a period of some years. He can do this without expending much time, if only he knows where to locate the news items quickly.

II. LIBRARY SOURCES FOR NEWS ITEMS

The *primary source* of all news items is the *newspaper*. Every library likely to be used by educators has files of some current papers and probably has bound volumes or files of at least the important newspapers in that locality. The New York Times is widely taken by libraries, often in a special rag paper edition

which is practically imperishable. The ordinary wood-pulp paper used by newspapers deteriorates and even breaks apart after a few years. Great difficulty arises in trying to run down news items in newspapers unless the particular paper has a cumulative index as in the case of The New York Times.

Because of the enormous numbers of items constantly being published, *special news digests*, using items from many papers, have a wide circulation. These digests reprint or condense selected news items, with or without editorial comment and interpretation. Among such special publications are The Literary Digest, Review of Reviews and World's Work, Time, News Week, and for foreign news, The Living Age. In any of these digests, education has its place just like any other large public interest, and some of them have special educational sections.

Many *weekly and monthly periodicals*, especially those in general fields, have news departments on items of special interest to their subscribers. A general periodical will give general news. A specialized or trade magazine will cover the news of particular interest in that field or trade.

Educational periodicals frequently have news items on matters of importance to their subscribers. Of such magazines, School and Society has probably been the best general one since 1915, particularly in higher education. In the fall of 1934, the Phi Delta Kappa started a department called "Keeping Abreast of the Times" which is promising for the same purpose. In the general educational field also, the American School Board Journal, The Nation's Schools, and School Executives Magazine always have good news notes, including "personals," although the emphasis is upon administration. The School Review and the Elementary School Journal give news items and editorial comment thereon for a particular kind of news. This is news originating in the publication of some document, as a superintendent's report or his circulars; a committee report, the action of some important school official, educational controversies that reach the stage of formal print, and the like.

For future educational events, such as dates of meetings, proposed work of committees, plans for yearbooks, and the like, the

periodical specializing in the field involved, may confidently be expected to carry appropriate news items.

III. HOW TO LOCATE NEWS ITEMS

To locate news items on any matter of interest, with any reasonable expenditure of time and energy, three procedures are necessary. First, locate the event or matter of interest in time and place as accurately as possible. Second, settle upon the most likely publications for news notes of this particular item. Third, find where files of these publications are accessible. The three procedures will be fully covered in the following treatment, although not always isolated as here listed.

1. *To locate the event or matter of interest in time and place as accurately as possible.*

This is necessary because most news of value will come at the time of its event and be reported in the papers or periodicals covering the natural news area in which the event occurred. Editorial comment is likely to come for important matters at the same time, and for less weighty things, a little later. Unless you know pretty accurately the date of an occurrence, you cannot know which volume of a publication to consult for news items about it. Files of newspapers, particularly those for dailies, are very voluminous. Unless you know fairly accurately the part of the country in which the occurrence took place, you cannot know the newspapers likely to treat it most fully.

The *date of an event* may be determined in various ways. You may have the year given in the reading which first brought the matter to your attention. You may determine this date from some historical treatment. For non-educational fields, a good general history of the United States will do nicely for the years it covers. For 1900 to 1918, Mark Sullivan's *Our Times* (165) will be very helpful. In educational matters, general or specialized histories of education, and the *American Yearbook* (6 : 97) may be useful. For outstanding events, a chronology such as that appearing regularly in the *World Almanac* (18) may help. For biographical information on deceased persons, an encyclopedia article or the

necrology in the same almanac will aid. Once you know the year, the New York Times Index (105) will enable you to place the event within the year for any year since 1913. Similarly useful are the New York Tribune Index from 1875 to 1906 (6 : 25), the London Times Official Index from 1906 down (6 : 25), and Palmer's Index to the Times News (London) since 1790 (6 : 25). The last is rather brief and useful only for events of world-wide interest.

The value of knowing how to locate the *place of an event* will be readily recognized when you need to find the newspaper or newspapers most likely to give full accounts of the occurrence. You can find *place* by the same means as for *time*, but the quickest way is through a news item carried by the New York Times Index or some other index.

2. *To look up the event or item in likely news digests.*

On important matters, such digests often cover many different newspapers for both news accounts and editorial opinion. Sometimes, as with The Literary Digest, a library index covers its volumes—in this case, the Readers' Guide (60). For all details, however, it is best to use the index for the proper annual volume of the particular digest used. To locate libraries carrying volumes of this digest, consult the Union List of Serials and Supplement (101), the same as for other periodicals. See Chapter XV, Section II.

3. *To look up the event or item in likely newspapers.*

If the item is of world-wide or national significance, files of the newspaper having the index, particularly The New York Times, may be sufficient for your purposes. Since the files of any daily newspaper will be very voluminous, it is advisable to try to locate the exact day of the happening before trying to get news about it in the papers. If the files of the one paper do not give sufficient news, you can look for similar items in other papers of about the same date. In recent years the press associations carry the news on the same day as The New York Times, or a day or so later. Editorial comment will follow a little later. Weekly and monthly

publications will probably be still later in carrying such news and editorial comment.

If the news desired is largely of local significance, or if you wish to get local slants or editorial comment by localities, you will need to get a list of sectional or local newspapers to consult. For this purpose, select suitable newspapers by using Ayer's Directory from 1880 to date (162), and Rowell's American Newspaper Directory from 1869 to 1880 (6 : 19). Before 1869, consult Mudge's Guide to Reference Books, heading of Newspapers, subheading of Catalogs (6).

To get access to past newspaper issues, you have several possibilities. If you need only one paper and that particular paper is still in existence, it will likely have a complete file of old issues. The New York Times Index (105) gives a list of libraries where that paper is on file. The Library of Congress has a very extensive collection of old newspapers from all over the country. The state library or the state historical association of the state in which the paper was published is almost certain to have many files of old papers, probably including this particular one. The Mudge reference mentioned at the end of the preceding paragraph will enable you to locate files of old newspapers in various libraries.

4. *To look up the event or item in likely periodicals with news departments.*

News notes in periodicals, educational or otherwise, are difficult to locate except through indexes of the bound volumes. Usually such notes, if indexed at all, are entered with some symbol in the index to show that they are news items, e.g., with "N." Bound volumes of these periodicals may be located as described in Section 2 preceding.

IV. INTERPRETING NEWS ITEMS

A note of warning on the interpretation of news items collected in isolation, particularly from old newspapers or periodicals, is advisable. To interpret such old notes successfully, much background of history and some training in historical research are often necessary. If you have to deal much with such old news

items, you will do well to consult a professor of history or of the history of education, who has done research with news notes. He will be able to cite you books or sections of books dealing with newspaper materials, as well as give you references on public opinion and propaganda in newspapers. The following also is good:

Call
Number

164. Salmon, L. M. *Newspaper and the Historian*. New York: Oxford University Press, 1923. 566 p.

V. BRINGING THE HISTORY OF A MATTER UP TO DATE BY USE OF NEWS ITEMS

Seldom will you find that a history of any educational matter of interest to you is completely up to date. To make a history so for your purposes, first study it carefully and list the topics on which you need to secure up-to-date knowledge. Next, beginning about the date of the latest information in the history available, run through periodicals and newspapers for news items dealing with the phases treated there, coming up as close to the present as seems desirable. By going from news digests, through news departments of periodicals, on to newspapers, you can attain any needed degree of intensity of treatment.

VI. PICTURES OF NEWS EVENTS

See Chapter XXVII, Section II.

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For *practice* in locating news items on old or recent events of interest to you, and on your major field, use Number 25 of the Alexander Library Exercises.

VII. BIBLIOGRAPHIC DATA ON REFERENCES FOR THIS CHAPTER

Details on the periodicals not otherwise cared for in the text may be found in Ayer (162), Ulrich (63), or Severance (62).

For the *history reference* to use in *establishing dates* from 1900 to 1918, see:

Call
Number

165. Sullivan, Mark. A History of Our Times: The United States, 1900-1925. New York, London: Charles Scribner's Sons. 5 vols. published at various dates, starting in March, 1926.

Vol. I, Turn of the Century, especially 1900-1903.

Vol. II, America Finding Herself, especially 1904-1905.

Vol. III, Pre-War America, especially 1906-1908.

Vol. IV, 1909-1914.

Vol. V, 1914-1918.

CHAPTER XXVI

QUOTATIONS AND PROVERBS

I. EFFECTIVE USE OF QUOTATIONS

FREQUENTLY the *practical educator* can make a serious point, inspire others, or move them to laughter more effectively with a pithy quotation or a word play on some well-known quotation, than by any other means. This is especially true when he desires pertinent humorous effects in his public speaking.

Much of the effectiveness attained in employing quotations depends on the user's native ability and fertility of ideas. But for most of the successful uses he can make very definite preparation if he only knows where to look. An experienced public speaker, in working up his address for a specific occasion, may select ten quotations so that he will be ready for all possible developments. He may use only one of the ten because as conditions shift in his speech, he sees that only the particular quotation is advisable. But this one properly used may give him an effect that all of his other efforts could not produce. Much the same holds for the use of quotations to strengthen written expression.

Note that the foregoing applies only to the use of quotations for producing desirable effects not otherwise attainable. Nothing here given is intended to further substituting the thoughts of others for one's own, or introducing too many, altogether too long, inappropriate, or unnecessary quotations. Such uses weaken expression to the point of futility.

Writing up a *research* is a technical procedure with slight use for ornament, argument from analogy, play on words, or humor. Still a little effective employment of all these in the introduction, summary, or interpretation sections may be thoroughly worth while. They may serve to get the research read when it might otherwise be ignored.

In all use of others' language for effective speaking or writing, the user should take pains to give a quotation accurately or indicate clearly that he is making a play of words upon it. In many instances, also, he will be expected to know who wrote it and where it appeared.

II. TYPICAL PROBLEMS IN LOCATING QUOTATIONS

For locating quotations, numerous reference books comprising collections of quotations are available. Few reference libraries will have all of them, but any good library is apt to have several. They are indexed in different ways, usually by author, by subject, or by first lines. Some quotation books are indexed in all three ways.

1. *To complete a quotation when the author is known.*

Suppose you wish to use Pope's couplet about "A little learning is a dangerous thing" and you remember only that he wrote it and that the other line is something about drinking deeply or not at all from some kind of a spring. Any good quotation book should turn this up promptly under the author index, heading of Pope.

2. *To find the author of a given quotation and where the complete writing appeared.*

For example, who wrote the following stanza? Where did it appear? What was the name of the complete poem and where may the poem be found?

Men look to the East for the dawning things,
For the light of the rising sun;
But they look to the West, the crimson West,
For the things that are done, are done.

No author is given, the stanza does not clearly indicate any likely title, although significant words may be clues to the real title. The best way to locate the poem quickly would appear to be to try some quotation book with a first-line index, hoping that this stanza is the first in the poem.

3. *To secure accurately the words of a garbled quotation and then identify it completely as in the two previous cases.*

For instance, can you attain such accuracy for a quotation to the effect that if a man only produces the best mousetrap in the whole world, people will make a track to his door even if he lives in the midst of a pathless woods?

From the wording, this looks as though it would be indexed under the headings of Mouse, Mousetrap, Fame, Reward, Honor and the like, and should be sought there in a book of quotations, unless you are fairly certain you remember the author. Even then, the subject index will usually give the answer more quickly.

4. *To find a telling quotation on a given topic.*

You may wish to stress thoroughness in school work, the value of patience, or the desirability of expecting that change will constantly come in education.

To locate such a quotation, use the subject index in a good quotation book, as the writer did for page 1 of this book.

5. *To secure a quotation expressing a humorous attitude toward something.*

In the writer's work he usually asks students to do this about his course. Recalling the horse anecdote in Chapter III, Section II, 3, they often give: "A horse! A horse! My kingdom for a horse!" One student impressed by the ingenuity required by the exercises, found this:

Perhaps the reward of the spirit who tries
Is not the goal but the exercise.

The first of these quotations was obviously located by looking in some quotation book under the heading of Horse. The second was found by using Reward for a heading. The humorous application in any such case will have to come from yourself. All a quotation book can do is to supply you with numerous quotations, scanning of which may somehow suggest a humorous application. The students in the first instance knew they desired something humorous about a horse before they went to the quotation book.

6. *To build up a personal collection of pithy quotations for various educational situations.*

This is best handled in card index form, each quotation with citation data on a separate card, and filed under some good subject heading. To build up a satisfactory collection of this kind, take down quotations that you think will be useful, as you run across them. Select carefully, as great numbers of quotations will defeat your purpose. You will find such quotations in any reading you happen to be doing, but especially likely sources are the Journal of the National Education Association, the Research Bulletins of the same, the Phi Delta Kappan, many state teachers' journals, and the Readers' Digest. These periodicals often set off timely quotations by "boxing," particularly on the covers, or in a foreword.

III. PROVERBS

Most of what has been said about quotations applies equally well to those wise folk-sayings known as Proverbs, except on the matter of authorship. As proverbs were handed down by word of mouth, their authorship was long ago lost except in the case of some collectors like King Solomon in the Bible. Often all the citation that can be given is one for nationality, e.g., Spanish proverb.

IV. REFERENCES FOR LOCATING QUOTATIONS

For suggestions as to which reference to use for a given problem in locating a quotation, see Section V following.

Call
Number

166. Bartlett, John. Familiar Quotations; a Collection of Passages, Phrases, and Proverbs Traced to Their Sources in Ancient and Modern Literature. 10th ed. rev. and enl. by Nathan Haskell Dole. Boston: Little, Brown and Company, 1914. 1454 p.
167. Granger, Edith. Index to Poetry and Recitations; Being a Practical Reference Manual for the Librarian, Teacher, Bookseller, Elocutionist, etc., including over Fifty Thousand Titles. Rev. ed. Chicago: A. C. McClurg and Company, 1924. 1059 p.

Call
Number

168. Supplement to same, 1929. 519 p.
169. Hoyt, Jehiel K. Hoyt's New Encyclopedia of Practical Quotations; Drawn from the Speech and Literature of All Nations, Ancient and Modern, Classic and Popular, in English and Foreign Text. With the names, dates, and nationality of quoted authors, and copious indexes; completely revised and greatly enlarged by Kate Louise Roberts. New York and London: Funk and Wagnalls, 1922. 1343 p.
170. New Dictionary of Thoughts; A Cyclopedia of Quotations from the Best Authors of the World, both Ancient and Modern, Alphabetically Arranged by Subjects. Originally compiled by Tryon Edwards, revised and enlarged by C. N. Catrevas. London and New York: Classic Publishing Company, 1931. 732 p.
171. Nuttall, P. Austin. The Nuttall Dictionary of Quotations; from Ancient and Modern, English and Foreign Sources. Selected and Compiled by the Rev. James Wood; New Edition with Supplement of Over 1,000 Quotations. Compiled by A. L. Haydon. London: Warne, 1930. 658 p.
172. Putnam's Complete Book of Quotations, Proverbs and Household Words: A Collection of Quotations from British and American Authors, with Many Thousands of Proverbs, Familiar Phrases and Sayings, from All Sources, Including Hebrew, Arabic, Greek, Latin, French, German, Italian, Spanish, and Other Languages. By W. Gurney Benham. New York: G. P. Putnam's Sons, 1926. 1224 p.
173. Stevenson, Burton E. The Home Book of Quotations, Classical and Modern. Selected and arranged by Burton Stevenson. New York: Dodd, Mead and Company, 1934. 2605 p.

Additional collections of quotations both for general and for special purposes are cited in Mudge (6) under the heading of Quotations.

V. CHECK LIST FOR DATES AND INDEXING ON BOOKS OF QUOTATIONS

The check list on the following page gives dates and methods of indexing for the eight references that are given in Section IV preceding.

Name of Book	Dates Covered	Author	Method of Indexing			Concordance
			Sub-ject	Title	First Line	
Bartlett	To 1914	x	x			
Granger	To 1924	x		x	x	
Granger Supplement	1919-1928	x		x	x	
Hoyt	To 1922	x	x			x
		(partial)				
New Dictionary of Thoughts	To 1931		x			
Nuttall	To 1930		x		x	
Putnam	To 1926	x	x			
Stevenson	To 1934	x	x			x
		(partial)				

VI. REFERENCES FOR LOCATING PROVERBS

Some proverbs are given in almost any book of quotations. Collections confined to proverbs may be located through Mudge (6).

For *practice* in finding quotations for your practical needs, and in verifying sayings not in shape for effective use, take Number 26 of the Alexander Library Exercises.

CHAPTER XXVII

PICTURES AND ILLUSTRATIONS

(*Other than Portraits*)

I. NEED FOR KNOWING HOW TO LOCATE PICTURES AND ILLUSTRATIONS

FOR generations, *good teachers* at all levels of public education and in religious schools as well *have constantly utilized pictures and illustrations* in their teaching. Without thinking much about it, such teachers soon learn the location of the good pictures for their purposes in the texts and other books close at hand. However, few of them have had opportunity to learn the vast potentialities of the library for locating pictures. If they only knew, their pupils could quickly find drawings of different elements to combine in pictures of the pupil's own designing for use in notebooks, reports, school posters, student publications, and the like.

Many teachers, moreover, do not realize the advantage of knowing how to locate several illustrations of the same thing. For instance, what does the Mississippi River mean to a child who has seen but a single picture of it and that a levee scene on the lower stretches, with cotton bales and roustabout Negroes? Again, what does the story of Jesus in the Temple signify to a child who has seen only one artist's conception of the incident?

While teachers have long recognized the value of pictures, it is not so generally understood that a *knowledge of how to locate special kinds of pictures and illustrations is a distinct asset to other educators as well*. Many presentations of school matters, and many educational articles and books would be far more effective if their authors only knew where to find quickly a few good pertinent illustrations.

II. SOURCES FOR LOCATING PICTURES AND ILLUSTRATIONS OF INTEREST TO EDUCATORS

For a single picture of almost anything, a *reference book* like a dictionary or encyclopedia is dependable. Compton's Pictured Encyclopedia (6 : 39) is especially good. Some dictionaries have a special section at the back which brings together all the illustrations printed separately with their respective words. A *textbook* usually reproduces from a fair to a large number of drawings or photographs of things in its field. By using several reference books or texts, a number of pictures of the same object may be obtained, different enough to add materially to one's knowledge of it.

For securing large numbers of *illustrations for use in teaching* or in the preparation of written materials on instruction, books on teaching methods, enriched teaching, or teaching aids are indicated. Among such books, the Standard Catalog for High School Libraries (180) and the Enriched Teaching in High School series (178) are particularly helpful in their field. The series so far includes separate books in six subject-areas, e.g., commercial subjects. For elementary schools, use (177).

Special indexes of pictures and illustrations are very useful in locating pictorial representations. They usually contain so many references that almost any library is sure to contain some of the illustrations indexed. The writer has found three such indexes to date:

Call
Number

174. Ellis, J. C. General Index to Illustrations. Boston: F. W. Faxon Company, 1931. 467 p.
22,000 selected references in all fields exclusive of Nature.
175. Ellis, J. C. Nature Index. Boston: F. W. Faxon Company, 1930. 319 p.
5,000 selected references to nature forms and illustrations of nature in design, painting, and sculpture.
176. Shepard, Frederick J. Index to Illustrations. Chicago: American Library Association, 1924. 89 p.
A picture index made by "combining the lists presumably made by a number of reference librarians of such pictures as they had been asked for or thought they might be asked

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for and which were to be found in other than obvious places."

Many entries for a *new edition* of this have been assembled but lack of funds has prevented compilation in a form for publication. For access to this additional collection, address Editor of Publications, American Library Association, Chicago, Illinois.

For pictorial representations in *history* from the fourth to the nineteenth centuries inclusive, see the Parmentier reference (four volumes in French) in Mudge (6 : 258).

Pictures of *news happenings* are of course likely to be given with the write-ups of their events. The New York Times Index (105) does not list pictures, but it can be used to determine the date of an occurrence. See Chapter XXV, Section III, 1. Any daily papers or periodicals of the news type available for that date or shortly thereafter, will be apt to carry pictures of the event. Many Sunday papers also carry special picture sections which will cover events occurring a week or so earlier. The New York Times picture service of this nature includes the Midweek Pictorial and the Sunday rotogravure sections. Both should be canvassed for pictures of any event, as the combination leads to earlier publication of pictures than is the case with papers having only Sunday illustrated sections.

Cartoons of course are to be found in large numbers in various newspapers and periodicals. To locate these on any topic, see the publications about the time of the occurrence likely to be cartooned. Pulse of the Nation, beginning in February of 1935, promises to be helpful here. For educational cartoons suggestive for drawing new ones, see Farley (179). The American School Board Journal has for many years had such a cartoon in every issue.

Clippings, pamphlets, pictures, and maps may be located through the Vertical File, sometimes called Information File (64), found in many reference libraries. Consult your reference librarian.

For pictures showing *current school practice*, take a suitable yearbook or a modern educational book of the popular type on the particular phase of interest, or an article on that aspect in

some periodical using pictures frequently. By means of the books or periodical articles, you can soon locate photographs of socialized recitations, kindergarten free play, activity program work, or student assembly. American School and University (148) is a yearbook good for pictures of current practice, buildings, and equipment in higher education. The annual Sweet's Catalog (149) has many pictures of school equipment as well as data on places where installations of various kinds of equipment may be seen.

Suggestions for *graphs* in presenting educational statistics will be found in Farley (179 : 100-114).

Certain *educational periodicals* use many photographs in connection with their articles. The Nation's Schools is a good example, including articles on buildings. The American School Board Journal specializes on photographs of new school buildings.

For *practice* in finding pictures and illustrations of interest to you in connection with your practical problems or writing of articles and books, use Number 27 of the Alexander Library Exercises.

III. ADDITIONAL DATA ON REFERENCES CITED IN THIS CHAPTER

Call
Number

177. Department of Elementary School Principals, National Education Association. Aids to Teaching in the Elementary School, p. 476. Thirteenth Yearbook. Washington, D. C.: National Education Association, 1934.

Cites on this page eleven references dealing largely with sources for pictures in this area.

178. Enriched Teaching in High School Series. Maxie N. Woodring and Others. New York: Bureau of Publications, Teachers College, Columbia University.

Commercial Subjects, 1930. English, 1927, revised in 1934. Latin, 1930. Mathematics, 1928. Physical Education, 1929. Science, 1928.

Each volume contains numerous references on illustrations, pictures, moving pictures, and graphic presentations.

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Call
Number

179. Farley, Belmont. School Publicity. Stanford University, Calif.: Stanford University Press, 1934. 118 p.

A practical manual, especially valuable for its section on graphic representation.

180. Standard Catalog for High School Libraries, p. 162. Zaidee Brown, Editor. New York: The H. W. Wilson Company, 1932.

On this page is a useful list for locating pictures on all sorts of subjects, e.g., agriculture, geography, minerals, ships, theatre, Washington, D. C.

CHAPTER XXVIII

PORTRAITS

I. ADVANTAGES OF KNOWING HOW TO LOCATE PORTRAITS

PORTRAITS, the likenesses of persons, can be used very advantageously in educational writing or in *printed instructional materials*. Many readers like to know how the author of whatever they are reading looks and enjoy a picture of him in connection with his writing. For this reason, the American School Board Journal and School Executives Magazine frequently have small pictures of the authors along with the titles of their articles. Most people expect pictures of the important personages in the news they read and of the "columnists" on their daily papers. In any historical reading or biography, pictures of the outstanding characters at different dates always arouse the reader's interest, and give him more vivid ideas of the developments treated. Good teachers and good textbooks have for generations used the portrait of a man when taking up the activity for which he was noted, be this music, art, authorship, war, exploration, invention, or what not. Motion pictures and television will accentuate such interest.

In making *personal contacts*, knowing how to locate portraits has great practical value. It enables one to prepare for an interview by previously studying the other man through his likeness. It also enables one to place instantly another whom he has never met. For example, if he can recognize the other at sight from having seen a portrait, he will have several chances to introduce himself under favorable circumstances at a convention attended by both. If one needs to call quickly by name a considerable number of individuals he has previously known, drilling in advance on their portraits will enable him to do this easily at the time it counts the most.

II. SOURCES FOR LOCATING PORTRAITS

A single portrait of any noted deceased person is likely to appear in the article about him in any good encyclopedia. One may be sought with confidence in any history which would be likely to treat his work, and uses any material number of pictures. Such a portrait usually represents the man at the height of his fame.

For any *prominent living person*, there is a chance to find a picture of him in the appropriate Who's Who or similar biographical book. To locate this book, see Chapter XXIV, Section II. Two such books are of such general value here as to merit special mention:

Call
Number

181. Dilly Tante, Editor. *Living Authors. A Book of Biographies.* New York: The H. W. Wilson Company, 1931. 466 p.
182. Kunitz, Stanley J. (Dilly Tante, pseudonym); Haycroft, Howard; and Hadden, W. C. *Authors Today and Yesterday: A Companion Volume to Living Authors.* New York: The H. W. Wilson Company, 1933. 726 p.

If the prominent living person figures in the general news at any time, accounts of him then will probably give his likeness as well. To locate these accounts, use the procedure for news items given in Chapter XXV, Section III. Any periodical index, e.g., Readers' Guide (60), is apt to note with the symbol "por." any portrait in a reference under the individual's name.

For portraits of *current government officials*, use the proper governmental directories or legislative manuals. Thus the Congressional Directory (157) will furnish portraits of members of Congress. Similarly the legislative manual for a given state will usually have pictures of the members of the legislature and other state officials. See Chapter XXIV, Section III, 3, b.

For *current portraits of living educators*, the Education Index (51) uses the same "por." symbol as the Readers' Guide (60). The last edition of Who's Who in American Education (139) has numerous portraits, several on the same page with a number key for the corresponding names. In this device it is very hard to avoid errors and some have crept into this edition. Any portrait located

in such a system should be checked with other sources, if at all feasible. For portraits of new and relatively unknown authors of educational books, the advertising circulars put out by their publishers individually for these books, will often have author portraits. Every library keeps such circulars on new books for a time. To locate them, consult your reference librarian.

For locating several *portraits of a person at different ages*, there are two chief possibilities. First, for portraits made before 1906:

Call
Number

183. Lane, W. C. and Browne, Nina E., Editors. A. L. A. Portrait Index. 1906. 1601 p.

Order from the Superintendent of Documents, Washington, D. C., sending in advance a money order for \$3.

A *new edition* was begun at the Library of Congress with the help of C. W. A. funds and about 140,000 cards were made before the work was discontinued in May, 1934, because of lack of funds. The card file, however, is available at the Library of Congress to inquirers.

Second, any biography or autobiography of the person is almost certain to have such pictures. The most scholarly book of this type about him will probably list the authentic portraits of him if there are disputed ones. Books of this type published in recent years are apt to have more such portraits than are the corresponding older publications.

For *practice* in locating portraits of interest to you in your teaching, writing of articles and books, or in research, use Number 28 of the Alexander Library Exercises.

INDEX

THE following index is constructed primarily to do two things:

1. Give the reader access to passages that will start him on locating materials on a given index entry.

2. Enable the reader to locate a reference for which he remembers only the popular title or the author's name.

In a few other cases, additional pages are cited for titles or authors whose specific contributions might need to be traced, but no effort has been made to do this for all titles or for all authors. For examples, to specify the pages on which Isadore G. Mudge, Leal A. Headley, *The Education Index*, or *The Cumulative Book Index* are mentioned, would require so many page citations under their respective index entries as to be ridiculous.

All numbers in the index refer to pages.

After each page citation for a numbered reference in the book, the symbol (r) appears.

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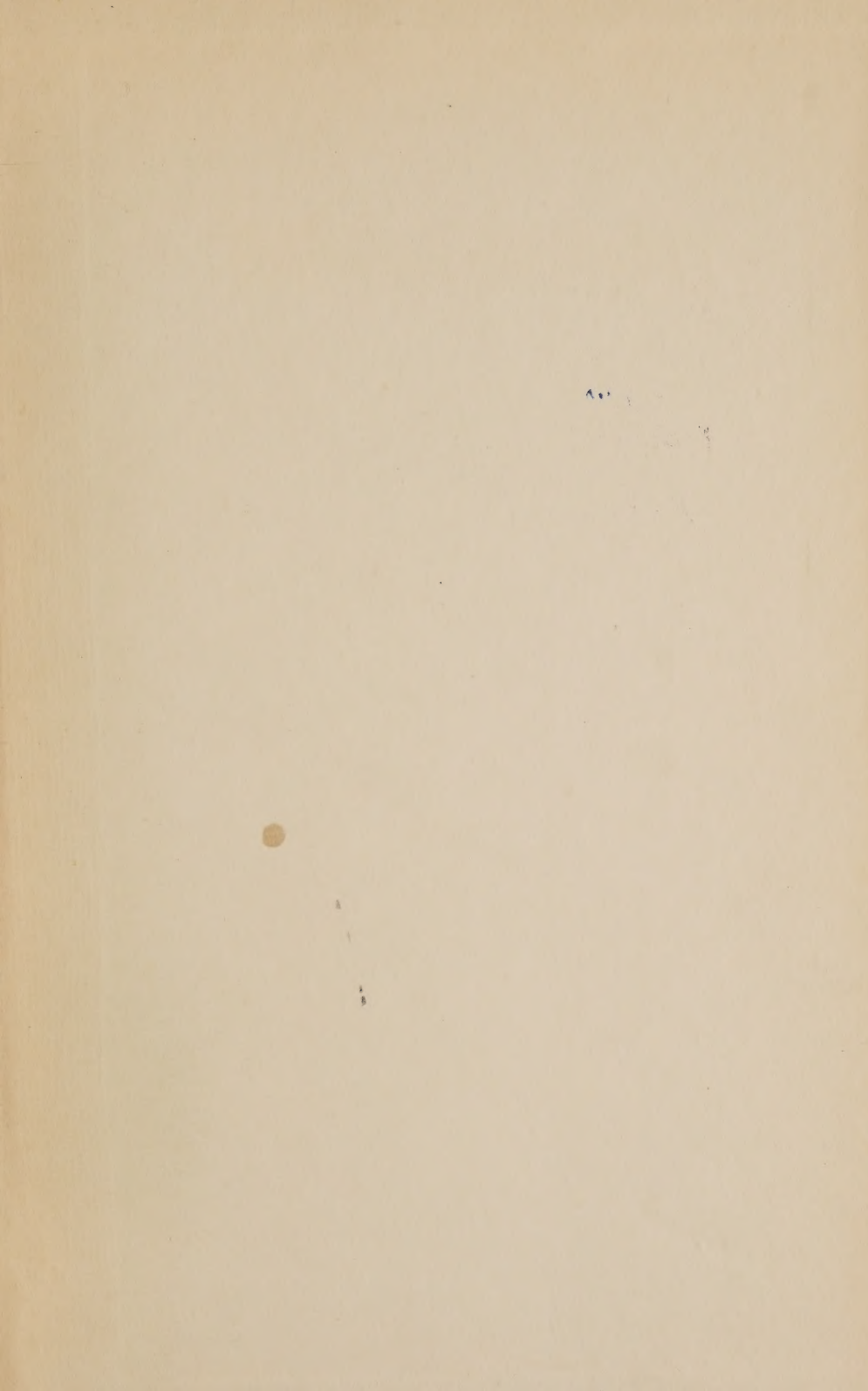
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